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A TABLE OF THE INVERSE SINE-AMPLITUDE FUNCTION IN THE COMPLEX DOMAIN

HENRY E. FETTIS

JAMES C. CASLIN

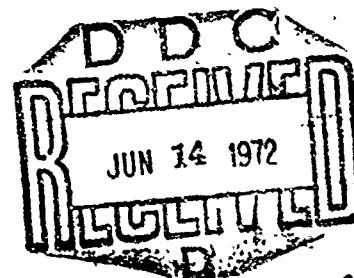
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13 ABSTRACT

Let $z = \operatorname{sn}(w, k)$ be the Jacobian sine-amplitude function as defined, e.g. in [1]. The tables list five-D values of the quantity $w = u + iv$ where z is given by $z = a + ib$, for the following values

$$\begin{aligned}
 a &= 0(.1)1 & b &= 0(.1)1 \\
 a &= .9(.01)1 & b &= 0(.1)1 \\
 a &= 0(.1)1 & \frac{1}{b} &= .01(.01).1 \\
 a &= 0(.1)1 & \frac{1}{b} &= .1(.1)1 \\
 \frac{1}{a} &= .01(.01).1 & b &= 0(.1)1 \\
 \frac{1}{a} &= .1(.1)1 & b &= 0(.1)1 \\
 \frac{1}{a} &= .01(.01).1 & \frac{1}{b} &= .01(.01).1 \\
 \frac{1}{a} &= .1(.1)1 & \frac{1}{b} &= .1(.1)1
 \end{aligned}$$

The values of u and v are expressed as decimal portions of the quarter-periods K and K' respectively. The modulus is given in the form $k = \sin \theta$, with $\theta = 5^\circ (5^\circ) 85^\circ (1^\circ) 89^\circ$.

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**A TABLE OF THE INVERSE SINE-AMPLITUDE
FUNCTION IN THE COMPLEX DOMAIN**

HENRY E. FETTIS

JAMES C. CASLIN

APPLIED MATHEMATICS RESEARCH LABORATORY

APRIL 1972

PROJECT 7071

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AEROSPACE RESEARCH LABORATORIES
AIR FORCE SYSTEMS COMMAND
UNITED STATES AIR FORCE
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

FOREWORD

The present tables were prepared by the Applied Mathematics Research Laboratory of Aerospace Research Laboratories, under Project No. 7071. The computations were initiated by Mr. Henry E. Fettis, and carried out by Mr. James C. Caslin on the CDC 6600 electronic digital computer.

ABSTRACT

Let $z = \text{sn}(w, k)$ be the Jacobian sine-amplitude function as defined, e.g. in [1]. The tables list five-D values of the quantity $w = u + iv$ where z is given by $z = a + ib$, for the following values

$$a = 0(.1)1 \quad ; \quad b = 0(.1)1$$

$$a = .9(.01)1 \quad ; \quad b = 0(.1)1$$

$$a = 0(.1)1 \quad ; \quad \frac{1}{b} = .01(.01).1$$

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The values of u and v are expressed as decimal portions of the quarter-periods K and K' respectively. The modulus is given in the form $k = \sin \theta$, with $\theta = 5^\circ(5^\circ)85^\circ(1^\circ)89^\circ$.

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INTRODUCTION

The Jacobian elliptic functions with complex argument occur primarily in problems of conformal mapping (see, e.g. [4]). Tabulated values of these functions can be found in [2] and [3]. Frequently it is desirous to know the inverse function, for example, to find w if $\text{sn}(w)$ is given. This would require interpolation in two variables, which is both inconvenient and inaccurate, particularly in some regions where a small change in the argument results in a large change in the function. The charts in [2] can be employed to obtain qualitatively correct values of the inverse function, but to date no explicit tabulation is known.

The present tables give values of the inverse sine-amplitude function $w = u + iv$ for values of a and b which cover the entire first quadrant of the $a + ib$ plane. The quantities u and v are expressed in the form u/K and v/K' where $K = K(k)$ and $K' = K(k')$ are the complete elliptic integrals with modulus k and $k' = \sqrt{1 - k^2}$, respectively. These quantities define the quarter-periods of the corresponding elliptic functions.

THE ADDITION FORMULA FOR THE INVERSE SINE-AMPLITUDE FUNCTION

Since by definition

$$v + iv = \text{sn}^{-1}(a + ib) = F(\psi, k) \quad (1)$$

where

$$a + ib = \sin(\psi) = \sin(\theta + i\phi), \quad (2)$$

the problem of obtaining the inverse sine-amplitude function is actually equivalent to computing the elliptic integral with complex amplitude. This could of course be accomplished directly either by series or reduction of modulus. However, a simpler method can be derived by using the addition formula for the amplitude function.

We have, considering first the case of real argument,

$$\psi = \theta + \phi = \operatorname{am}(u+v) \quad (3)$$

and by the addition formula [1]

$$\tan \theta = \operatorname{tn} u \operatorname{dn} v \quad (4)$$

$$\tan \phi = \operatorname{tn} v \operatorname{dn} u$$

where the modulus of the elliptic functions is k .

Eliminating successively $\operatorname{sn} u$ and $\operatorname{sn} v$ between Eqs (4) we get

$$k^2 \cos^2 \phi \operatorname{sn}^4 u - [1 + k^2 (\sin^2 \theta \cos^2 \phi - \cos^2 \theta \sin^2 \phi)] \operatorname{sn}^2 u + \sin^2 \theta = 0 \quad (5)$$

$$k^2 \cos^2 \theta \operatorname{sn}^4 v - [1 + k^2 (\cos^2 \theta \sin^2 \phi - \sin^2 \theta \cos^2 \phi)] \operatorname{sn}^2 v + \sin^2 \phi = 0$$

Solving gives

$$\operatorname{sn} u = \frac{\sqrt{(1 + k \sin \theta \cos \phi)^2 - k^2 \cos^2 \theta \sin^2 \phi} - \sqrt{(1 - k \sin \theta \cos \phi)^2 - k^2 \cos^2 \theta \sin^2 \phi}}{2k \operatorname{ccs} \phi} \quad (6)$$

$$\operatorname{sn} v = \frac{\sqrt{(1 + k \cos \theta \sin \phi)^2 - k^2 \sin^2 \theta \cos^2 \phi} - \sqrt{(1 - k \cos \theta \sin \phi)^2 - k^2 \sin^2 \theta \cos^2 \phi}}{2k \cos \theta}$$

Making use of Eq. 2 and the result

$$\begin{aligned}\cos \theta &= \frac{1}{2} \{ \sqrt{(1+b)^2 - a^2} + \sqrt{(1-b)^2 - a^2} \}, \\ \cos \phi &= \frac{1}{2} \{ \sqrt{(1+a)^2 - b^2} + \sqrt{(1-a)^2 - b^2} \},\end{aligned}\tag{7}$$

Eqs. 6 may be written explicitly in terms of a and b .

In the case of complex argument v is replaced by iv , ϕ by $i\phi$, and b by ib . The first equation 6 becomes

$$\begin{aligned}\operatorname{sn}(u, k) &= \frac{\sqrt{(1+ka)^2 + (kb)^2} - \sqrt{(1-ka)^2 + (kb)^2}}{2k \cosh \phi} \\ &= \frac{\sqrt{(1+a)^2 + (b)^2} - \sqrt{(1-a)^2 + (b)^2}}{\sqrt{(1+ka)^2 + (kb)^2} + \sqrt{(1-ka)^2 + (kb)^2}}\end{aligned}\tag{8}$$

while the imaginary part is more easily calculated from the second Eq. 4, after using the transformation $\operatorname{tn}(iv, k) = \operatorname{sn}(v, k')$

$$\operatorname{sn}(v, k') = \frac{\tanh \phi}{\sqrt{1 - k'^2 \operatorname{sn}^2 u}}\tag{9}$$

With $\operatorname{sn}(u, k)$ and $\operatorname{sn}(v, k')$ known it is easy to find u and v by the conventional method of modulus reduction from the formulae

$$u = F(\alpha, k)$$

$$v = F(\beta, k')$$

where $\sin \alpha = \operatorname{sn} u$, $\sin \beta = \operatorname{sn} v$.

In the case where $b = 0$, Eqs. 8 and 9 simplify to

$$\begin{aligned} \operatorname{sn}(u, k) &= \frac{(1 + ka) - |1 - ka|}{2k \cosh \phi} \\ \operatorname{sn}(v, k') &= \frac{\tanh \phi}{\sqrt{1 - k^2 \operatorname{sn}^2 u}} \quad (10) \\ \cosh \phi &= \frac{1}{2}[(1 + a) + |1 - a|] \end{aligned}$$

If $a < 1$, the above equations give

$$\phi = 0$$

$$\operatorname{sn}(u, k) = a \quad (11)$$

$$\operatorname{sn}(v, k) = 0$$

and

$$u + iv = F(\sin^{-1} a, k). \quad (12)$$

If $a > 1$ and $ka \geq 1$, we obtain

$$\cosh \phi = a$$

$$\tanh \phi = \sqrt{a^2 - 1/a} \quad (13)$$

$$\operatorname{sn}(u, k) = 1/ka$$

$$\operatorname{sn}(v, k') = 1.$$

Hence

$$u + iv = F[\sin^{-1}(1/ka), k] + iK'(k). \quad (14)$$

Finally if $a > 1$ and $ka \leq 1$

$$\cosh \phi = a$$

$$\operatorname{sn}(u, k) = 1 \quad (15)$$

$$\operatorname{sn}(v, k') = \sqrt{a^2 - 1/ak'}$$

and

$$u + iv = K(k) + iF(\sqrt{a^2 - 1/ak'}, k'). \quad (16)$$

If $ka = 1$, both Eqs. 14 and 16 give

$$u + iv = K(k) + iK'(k) \quad (17)$$

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- [3] Henderson, F. M., "Elliptic Functions with Complex Arguments", University of Michigan Press (1960).
- [4] Kober, H., "Dictionary of Conformal Representations", Dover (1952).

$$J + IV = SN \quad (A + TB)$$

5 SIN X

B	A=0.00	A=.10	A=.20	A=.30	A=.40	A=.50	A=.60	A=.70	A=.80	A=.90	A=1.00
0.00	0.00000	.06365	.12795	.19363	.26154	.33281	.40905	.49303	.58975	.71235	1.00000
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	.06333	.12726	.19253	.25919	.33038	.40542	.46711	.57879	.68517	.79997
	0.02605	.02618	.02659	.02730	.02810	.03003	.03244	.03617	.04244	.05484	.06350
.20	0.00000	.06239	.12532	.18936	.25518	.32352	.39530	.47152	.55294	.63825	.71956
	.05185	.05210	.05287	.05423	.05630	.05932	.06367	.07007	.07985	.09531	.11096
.30	0.00000	.06091	.12225	.18445	.24737	.31326	.38072	.46052	.52211	.59335	.65965
	.07716	.07750	.07858	.08045	.08328	.08731	.09294	.10079	.11175	.12667	.14670
.40	0.00000	.05901	.11632	.17822	.23898	.30073	.36370	.42745	.49110	.55314	.61071
	.10177	.10219	.10349	.10574	.10908	.11374	.12005	.12844	.13941	.15342	.17048
.50	0.00000	.05601	.11380	.17113	.22831	.28716	.34574	.40424	.46164	.51729	.56900
	.12555	.12602	.12746	.12994	.13356	.13855	.14510	.15349	.16395	.17677	.19173
.60	0.00000	.05443	.10693	.16357	.21834	.27315	.32760	.38184	.43460	.48519	.53260
	.14639	.14829	.15040	.15299	.15675	.16189	.16830	.17641	.18626	.19768	.21117
.70	0.00000	.05196	.10392	.15586	.20770	.25931	.31043	.36067	.40951	.45629	.50034
	.17023	.17074	.17228	.17489	.17863	.18360	.18988	.19757	.20672	.21730	.22922
.80	0.00000	.04949	.09892	.14922	.19728	.24593	.29391	.34089	.38646	.43014	.47144
	.19107	.19157	.19309	.19565	.19929	.20408	.21005	.21726	.22572	.23537	.24613
.90	0.00000	.04707	.09405	.14083	.18727	.23319	.27637	.32252	.35531	.40636	.44535
	.21090	.21139	.21286	.21532	.21892	.22336	.22899	.23571	.24350	.25213	.26210
1.00	0.00000	.04474	.05937	.13376	.17776	.22119	.26386	.30551	.34588	.38468	.42165
	.23022	.23163	.23398	.23729	.24157	.24683	.25337	.26025	.26634	.27725	

$U/K + IV/K'$
 -1
 $U+IV=SN^- (A+18)$

K=SIN 10										
	A=0.10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
0.00	0.00000	*06329	*12724	*19259	*26020	*33123	*40733	*49120	*58799	*71095
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	*05296	*12655	*19147	*25053	*32877	*40362	*48521	*57692	*68350
	0.03166	.03182	.03272	.03321	.03457	.03659	.03950	.04419	.05194	.06724
.20	0.00000	*06200	*12456	*18826	*25375	*32181	*39336	*46944	*55076	*63612
	0.06300	.06331	.06426	.06595	.06852	.07226	.07766	.08555	.09768	.11678
.30	0.00000	*06050	*12144	*18326	*24642	*31133	*37857	*44815	*51958	*59070
	.09372	.09416	.09549	.09762	.10133	.10634	.11332	.12305	.13662	.15534
.40	0.00000	*05857	*11744	*17692	*23728	*29872	*36129	*42474	*48821	*54993
	.12359	.12412	.12573	.12852	.13268	.13648	.14631	.15672	.17034	.18770
.50	0.00000	*05633	*11204	*16970	*22703	*28486	*34304	*40115	*45840	*51352
	.15242	.15300	.15480	.15789	.16241	.16660	.17674	.18717	.20023	.21611
.60	0.00000	*05390	*10768	*16200	*21627	*27060	*32477	*37836	*43066	*48084
	.18007	.18070	.18259	.18582	.19050	.19679	.20486	.21498	.22724	.24172
.70	5.00000	*05138	*10276	*15413	*20542	*25643	*30706	*35677	*40509	*45136
	.20649	.20713	.20905	.21230	.21697	.22317	.23101	.24060	.25201	.26522
.80	0.00000	*04886	*9766	*14634	*19477	*24281	*29018	*33657	*38154	*42462
	.23165	.23228	.23418	.23738	.24193	.24791	.25536	.26439	.27495	.28702
.90	0.00000	*04638	*99267	*13877	*18453	*22978	*27428	*31776	*35988	*40027
	.25556	.25617	.25801	.26110	.26547	.27116	.27620	.28661	.29637	.30743
1.00	0.00000	*04400	*8788	*13152	*17478	*21748	*25941	*30032	*33995	*37801
	.27624	.27883	.28059	.28353	.28768	.29395	.29965	.30747	.31649	.33784

$U/K + IV/K'$
 -1
 $I+IV=SN$ ($A+\gamma$)

K=SIN 15

		$A = 0.00$	$A = .10$	$A = .20$	$A = .30$	$A = .40$	$A = .50$	$A = .60$	$A = .70$	$A = .80$	$A = .90$	$A = 1.00$
0.00	0.00000	.06266	.12605	.19085	.25797	.32857	.40639	.4812	.56502	.70850	.1.00000	.00000
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	.06235	.12535	.18371	.25626	.32607	.40060	.48201	.57376	.68067	.79641	.11695
	.03606	.03684	.03789	.03950	.04184	.04539	.05080	.05986	.07775			
.20	0.00000	.06137	.12331	.18641	.25136	.31695	.39012	.46592	.54714	.63251	.71400	.16908
	.07175	.07211	.07324	.07523	.07826	.08267	.08902	.09834	.11252	.13490		
.30	0.00000	.05983	.12010	.18129	.24385	.30821	.37499	.44417	.51530	.58620	.65222	
	.10671	.10722	.10880	.11155	.11569	.12159	.12992	.14127	.15722	.17921	.20804	
.40	0.00000	.05784	.11600	.17476	.23447	.29521	.35728	.42021	.48321	.54451	.60145	
	.14066	.14128	.14319	.14649	.15140	.15824	.16748	.17975	.19580	.21626	.24120	
.50	0.00000	.05554	.11127	.16736	.22335	.28106	.33825	.39602	.45265	.50716	.55794	
	.17336	.17407	.17620	.17985	.18520	.19251	.20213	.21445	.22987	.24863	.27062	
.60	0.00000	.05304	.10616	.15344	.21286	.26640	.31970	.37258	.42414	.47355	.51977	
	.20471	.20545	.20769	.21151	.21705	.22451	.23408	.24603	.26055	.27770	.29732	
.70	0.00000	.05044	.10089	.15133	.20170	.25185	.30153	.35035	.39777	.44314	.48576	
	.23458	.23533	.23761	.24147	.24701	.25435	.26365	.27502	.28856	.30424	.32192	
.80	0.00000	.04784	.09562	.14529	.19072	.23774	.28411	.32949	.37345	.41550	.45515	
	.26295	.26370	.26595	.26975	.27516	.28227	.29113	.30183	.31439	.32876	.34480	
.90	0.00000	.04528	.09047	.13547	.18013	.22428	.26768	.31004	.35103	.39027	.42739	
	.28984	.29056	.29275	.29542	.30162	.30839	.31677	.32678	.33941	.35160	.36622	
1.00	0.00000	.04282	.08552	.12797	.17005	.21155	.25227	.29197	.33036	.36735	.40207	
	.31527	.31597	.31666	.32157	.32651	.33291	.34077	.35009	.36066	.37299	.38638	

$U/K + IV/K'$
 $U+IV=SN^{-1}$ (A+(B))

K=SIN 20

		A= 0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
10	0.00	0.00000	.06164	.12439	.18141	.25454	.32486	.40023	.48374	.58077	.70499	1.00000
	0.00	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
	.10	0.00000	.66150	.12366	.18724	.25308	.32227	.39633	.47748	.56924	.67653	.79315
	.03985	.04007	.04076	.04197	.04393	.04657	.05062	.05685	.06729	.08776	.13435	
	.20	0.00000	.06068	.12155	.18183	.24602	.31493	.38554	.46094	.54195	.62730	.70888
	.07927	.07969	.08100	.08330	.08681	.09190	.09923	.10997	.12630	.15201	.19127	
	.30	0.00000	.05889	.11825	.17154	.24027	.30393	.36995	.43356	.50922	.57973	.64539
	.11785	.11844	.12026	.12345	.12825	.13507	.14456	.15760	.17620	.20156	.23481	
	.40	0.00000	.05684	.11401	.17182	.23058	.29051	.35168	.41385	.47614	.53675	.59239
	.15526	.15598	.15819	.16201	.16770	.17561	.18631	.20050	.21906	.24273	.27160	
10	.50	0.00000	.05445	.10911	.16415	.21970	.27580	.33232	.38885	.44455	.49612	.54793
	.19124	.19205	.19451	.19874	.20494	.21341	.22456	.23884	.25671	.27847	.30400	
	.60	0.00000	.05187	.10383	.15595	.20824	.26063	.31269	.36458	.41502	.46327	.50820
	.22562	.22647	.22967	.23350	.23993	.24657	.25968	.27355	.29041	.31034	.33319	
	.70	0.00000	.04916	.09837	.14755	.19667	.24555	.29398	.34153	.38765	.43167	.47288
	.25829	.25917	.26181	.26629	.27271	.28124	.29204	.30525	.32099	.33925	.35987	
	.80	0.00000	.04645	.09292	.15922	.20529	.23094	.27592	.31988	.36237	.40291	.44097
	.28923	.29010	.29271	.29712	.30341	.31165	.32106	.33441	.34903	.36578	.38450	
	.90	0.00000	.04364	.08758	.13112	.17431	.21697	.25886	.29967	.33906	.37663	.41201
	.31845	.31929	.32183	.32609	.33213	.34000	.34974	.35136	.37493	.39031	.40739	
	1.00	0.00000	.04129	.08244	.12335	.16395	.20377	.24287	.28090	.31756	.35256	.39560
		.34679	.34922	.35329	.35903	.36645	.37560	.38645	.39898	.41312	.42876	

$U/K + IV/K$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN/25

		A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
0.00	0.00000	.05076	.12226	.1628	.25079	.32003	.39480	.47801	.57516	.70031	1.00000	1.00000
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	.06040	.12150	.18406	.24816	.31735	.39077	.47153	.56320	.67114	.78873	.15123
	.04323	.04348	.04426	.04565	.04778	.05092	.05555	.06266	.07455	.09783		
.20	0.00000	.05935	.11932	.18053	.24373	.30975	.37960	.45443	.53510	.62035	.70194	
	.06596	.06644	.06794	.09057	.09458	.10041	.10680	.12107	.13972	.16905	.21382	
.30	0.00000	.05770	.11589	.17505	.23569	.29834	.36345	.43125	.50122	.57113	.63617	
	.12773	.12841	.13049	.13414	.13963	.14744	.15833	.17345	.19452	.22354	.26163	
.40	0.00000	.05557	.11149	.16808	.22564	.28443	.34450	.40562	.46690	.52650	.58165	
	.16816	.16398	.17151	.17589	.18240	.19146	.20371	.21998	.24125	.26640	.30153	
.50	0.00000	.05310	.10642	.16012	.21436	.26917	.32441	.37966	.43407	.48630	.53465	
	.20695	.20787	.21069	.21553	.22254	.23234	.24511	.26149	.28203	.30700	.33639	
.60	0.00000	.05042	.10094	.15162	.20246	.25345	.30424	.35445	.40336	.44999	.49324	
	.24391	.24689	.24786	.25293	.26029	.27018	.28292	.29882	.31818	.34109	.36741	
.70	0.00000	.04764	.09529	.14293	.19048	.23780	.28461	.33050	.37489	.41707	.45628	
	.27893	.27993	.28294	.28807	.29542	.30519	.31754	.33269	.35075	.37173	.39546	
.80	0.00000	.04485	.08964	.13430	.17669	.22265	.26588	.30803	.34863	.38714	.42202	
	.31196	.31295	.31593	.32097	.32815	.33757	.34937	.36362	.38037	.3956	.42109	
.90	0.00000	.04211	.08413	.12592	.16734	.20813	.24822	.28710	.32445	.35986	.39291	
	.34302	.34398	.34688	.35174	.35863	.36760	.37872	.39203	.40752	.42512	.44468	
1.00	0.00000	.03948	.07683	.11790	.15655	.19456	.23169	.26768	.30221	.33494	.36555	
	.37216	.37308	.37565	.38048	.38702	.39548	.40589	.41826	.43254	.44868	.46652	

$U/K \approx IV/K$
 -1
 $U+IV=SN$ (A+IB)

K=SIN 30

B	A=0.00	A=.10	A=.20	A=.30	A=.40	A=.50	A=.60	A=.70	A=.80	A=.90	A=1.00
0.00	0.00000 0.00000	.05944 .00000	.11965 .00000	.16144 .00000	.24581 .00000	.31406 .00000	.38806 .00000	.47082 .00000	.56607 .00000	.69432 .00000	1.00000 .00000
.10	0.00000 .04627	.05907 .04656	.11887 .04745	.16017 .04902	.24392 .05145	.31127 .05501	.38387 .06028	.46409 .06837	.55574 .06189	.66416 .10830	.78294 .16874
.20	0.00000 .09193	.05798 .09253	.11660 .09423	.17651 .09722	.23848 .10178	.30331 .10841	.37226 .11795	.44632 .13192	.52647 .15314	.61146 .18653	.69286 .23752
.30	0.00000 .13660	.05627 .13737	.11304 .13974	.17062 .14368	.23013 .15011	.29152 .15899	.35546 .17138	.42220 .18860	.49120 .21260	.56018 .24571	.62418 .28925
.40	0.00000 .17970	.05407 .18064	.10844 .16350	.16359 .16847	.21971 .20615	.27707 .22008	.33576 .23859	.39553 .26284	.45544 .29383	.51360 .33187	.56711 .33187
.50	0.00000 .22095	.05151 .22199	.10323 .22518	.15535 .23067	.20801 .23872	.26124 .24973	.31499 .26423	.36853 .26205	.42124 .30620	.47163 .33471	.51790 .36832
.60	0.00000 .26012	.04874 .26123	.09757 .26458	.14656 .27032	.19771 .27664	.24493 .2896+	.29397 .30428	.34235 .32232	.38930 .34431	.43360 .37039	.47465 .40038
.70	0.00000 .29709	.04507 .29522	.09174 .30162	.13758 .30740	.18332 .31570	.22877 .32673	.27366 .34070	.31754 .35783	.35978 .37829	.39961 .40207	.43622 .42900
.80	0.00000 .33183	.04300 .33294	.08593 .33630	.12870 .34197	.17118 .35004	.21316 .36066	.25434 .37394	.29434 .39001	.33265 .40890	.36867 .43057	.40102 .45484
.90	0.00000 .36435	.04019 .36543	.08027 .36867	.12010 .37412	.15952 .38185	.19831 .39192	.23620 .40440	.27283 .41933	.30779 .43671	.34063 .45646	.37088 .47839
1.00	0.00000 .39472	.03749 .39575	.07485 .39684	.11190 .40401	.14848 .41131	.18436 .42076	.21929 .43239	.25297 .44629	.28505 .46214	.31517 .48013	.34297 .50000

$U/K - IV/K'$
 $J + IV = SN^{-1}$
 $\{A + IB\}$

K=SIN 35

	B	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
0.00	0.00000 0.00000	.05789 .00000	.11657 .00000	.17689 .00000	.23792 .00000	.30401 .00000	.37555 .00000	.45505 .00000	.46207 .00000	.55933 .00000	.68683 .00000	1.00000 .00000
.10	0.00000 .04904	.05750 .04936	.11576 .05036	.17557 .05214	.23792 .05487	.30401 .05891	.37555 .06488	.45505 .07407	.54646 .08943	.65543 .11942	.77550 .18800	
.20	0.00000 .09744	.05638 .09806	.11341 .09997	.17178 .10334	.23227 .10649	.29583 .11594	.36346 .12679	.43650 .14264	.51589 .16676	.60035 .20478	.68120 .26296	
.30	0.00000 .14461	.05461 .14546	.10973 .14614	.16588 .15280	.22352 .15983	.28343 .16986	.34598 .16367	.41134 .20338	.47903 .23065	.54665 .26835	.60899 .31609	
.40	0.00000 .19008	.05233 .19113	.10502 .19334	.15941 .19593	.21262 .20824	.26850 .21984	.32551 .23556	.38357 .25649	.44171 .28397	.49769 .31918	.5404 .36246	
.50	0.00000 .23347	.04970 .23464	.09960 .23821	.14991 .24436	.20074 .25339	.25212 .26575	.30388 .28208	.35554 .30305	.40613 .32942	.45413 .35167	.49759 .39974	
.60	0.00000 .27453	.04685 .27576	.09378 .27951	.14086 .28592	.18807 .29523	.23531 .30777	.28229 .32334	.32847 .34419	.37306 .36868	.41491 .39819	.45272 .43192	
.70	0.00000 .31314	.04391 .31439	.06781 .31818	.13166 .32461	.17536 .33386	.21872 .34614	.26142 .36172	.30296 .36085	.34268 .40367	.37973 .43021	.41319 .46024	
.80	0.00000 .34926	.04098 .35049	.08168 .35421	.12259 .36049	.16296 .36945	.20271 .38122	.24167 .35955	.27926 .41377	.31496 .43471	.34814 .45871	.37814 .46552	
.90	0.00000 .38292	.03813 .38411	.07613 .38769	.11385 .39370	.15112 .40222	.18765 .41335	.22324 .42709	.25741 .44354	.28975 .46267	.31976 .48435	.34693 .50837	
1.00	0.00000 .41421	.03540 .41534	.07065 .41873	.10557 .42441	.13996 .43242	.17357 .44274	.20616 .45552	.23739 .47063	.26686 .48805	.29621 .50765	.31903 .52921	

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+iB)$

K=SEN 4.8

B	A=0.30	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
.0.00	0.00000	.05670	.11301	.17162	.23279	.29354	.37031	.45162	.54875	.67761	1.00000
.10	0.00000	.00000	.00000	.00000	.00006	.00000	.00000	.00000	.00000	.00000	.00000
.20	0.00000	.05454	.10975	.16634	.22511	.28700	.35316	.42488	.50317	.58671	.66638
.30	0.00000	.10237	.11306	.10520	.10597	.11474	.12116	.13534	.15228	.18067	.22400
.40	0.00000	.15184	.25280	.15577	.16097	.16843	.21616	.27424	.33499	.39864	.46459
.50	0.00000	.19939	.20056	.20414	.21035	.21951	.23258	.25017	.29183	.32173	.34658
.60	0.00000	.24464	.24594	.24990	.25672	.26675	.28051	.31380	.36960	.42570	.52722
.70	0.00000	.28732	.28868	.29262	.29490	.31018	.32405	.34195	.36439	.39175	.42421
.80	0.00000	.36452	.36536	.36993	.37679	.38058	.39541	.41553	.43497	.45777	.49383
.90	0.00000	.39907	.4036	.40425	.41078	.41735	.42337	.43209	.44701	.46582	.48547
1.00	0.00000	.43104	.43226	.43592	.44205	.45059	.46185	.47553	.49161	.51046	.55423

$$J + IV_{23}N - I(A+18)$$

X = SINK 45

		A= .00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
0		.000000	.05407 .00000	.10097 .00000	.16561 .00000	.22510 .00000	.28089 .00000	.35913 .00000	.43930 .00000	.53607 .00000	.66667 .000001	1.00000 .00000
0.00		.000000	.05407 .00000	.10097 .00000	.16561 .00000	.22510 .00000	.28089 .00000	.35913 .00000	.43930 .00000	.53607 .00000	.66667 .000001	1.00000 .00000
.10		.000000	.05366 .05420	.10811 .05544	.16422 .05765	.22299 .06107	.28577 .06616	.35638 .07374	.43166 .08551	.52184 .10539	.63143 .14450	.75375 .23443
.20		.000000	.05248 .10758	.10564 .10994	.16019 .11412	.21696 .12054	.27695 .12994	.34129 .14359	.41134 .16381	.48811 .19466	.57015 .24426	.64769 .32068
.30		.000000	.05062 .15631	.10177 .15939	.15398 .16841	.23784 .17712	.26381 .18962	.32249 .20719	.38405 .23186	.44777 .26659	.51082 .31501	.56708 .37938
.40		.000000	.04825 .20771	.09665 .20899	.14014 .21293	.19643 .21978	.24794 .23000	.30069 .2435	.35426 .26386	.40747 .29000	.45786 .32450	.50168 .36690
.50		.000000	.04552 .25457	.09122 .25559	.13725 .26033	.18382 .26781	.23071 .27682	.27793 .29395	.32464 .31397	.36973 .33979	.41138 .37231	.44719 .41210
.60		.000000	.04259 .29861	.08523 .30099	.12796 .31233	.17073 .32356	.21237 .33671	.25551 .35829	.29650 .38281	.33535 .41270	.37072 .44806	.40104 .48846
.70		.000000	.03959 .33970	.07914 .34119	.11058 .35337	.15775 .36440	.19641 .37905	.23417 .39764	.27044 .42042	.30441 .44753	.33511 .47896	.36148 .51396
.80		.000000	.03664 .37782	.07316 .37927	.10945 .38366	.14524 .40167	.18033 .41546	.21430 .43278	.24664 .45365	.27673 .47807	.30384 .50583	.32724 .53651
.90		.000000	.03350 .41305	.06743 .41860	.10072 .42561	.13345 .43551	.16534 .46041	.19603 .46434	.22509 .46331	.25202 .50522	.27629 .52985	.29736 .55680
1.00		.000000	.03111 .44551	.06203 .45672	.09257 .45725	.12249 .46643	.15153 .47830	.17937 .49284	.20565 .50999	.22998 .52963	.26193 .55152	.27115 .57532

U/K+IV/K'
-1
U+IV=SN (A+IB)

K=SIN 50

B	A=0.00	A= .10	F= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
0.00	0.00208	.05230	.10444	.15985	.21616	.27783	.34624	.42491	.52097	.65247	1.00000
	0.00003	.00003	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	.15139	.10357	.15743	.21401	.27467	.34132	.41686	.50543	.61526	.73793
	.05582	.05326	.05762	.06006	.06384	.06946	.07796	.09122	.11384	.15879	.26311
.20	0.00000	.05019	.10106	.15234	.20787	.26563	.32780	.3957	.47048	.55027	.62428
	.11420	.11420	.11660	.12588	.13628	.15148	.17414	.20921	.26547	.35344	
.30	0.00006	.06851	.09715	.14704	.19854	.25220	.30849	.36755	.42652	.48813	.53966
	.16521	.16521	.16637	.17512	.18469	.19846	.21790	.24533	.28413	.33845	.41075
.40	0.00300	.04592	.09219	.13913	.18703	.23608	.2866	.33798	.38715	.43377	.47277
	.21508	.21508	.21647	.22076	.22922	.23940	.25510	.27654	.30532	.34337	.39236
.50	0.00000	.04318	.09655	.13024	.17433	.21878	.26327	.30710	.34697	.38688	.41627
	.25331	.26485	.26955	.27767	.28964	.30609	.32789	.35501	.39143	.43465	.48515
.60	0.00000	.04026	.08057	.12092	.16125	.20435	.24083	.27895	.31466	.34652	.37292
	.30850	.31010	.31497	.32330	.33542	.35177	.37290	.39935	.43151	.46939	.51232
.70	0.00000	.03729	.07452	.11160	.14830	.18453	.21967	.25316	.28415	.31163	.33456
	.35051	.35211	.35694	.36516	.37690	.39269	.41258	.43691	.46577	.49644	.53579
.80	0.00000	.03438	.06862	.10258	.13603	.16869	.20013	.22983	.25714	.28133	.30171
	.38933	.39068	.39555	.40344	.41467	.42940	.44778	.46988	.49563	.52474	.55664
.90	0.00000	.03159	.06350	.09495	.12449	.15404	.18231	.20889	.23325	.25487	.27328
	.42508	.42654	.43096	.43837	.44885	.46245	.47924	.49917	.52209	.54771	.57552
1.00	0.00000	.02897	.05774	.08611	.11383	.14064	.16620	.19015	.21209	.23166	.24848
	.45753	.45926	.46337	.47624	.47989	.49233	.50755	.54583	.56843	.59284	

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K= SIN 55

B	A=0.00	A=.10	A=.20	A=-.30	A=.40	A=.50	A=.60	A=.70	A=.80	A=.90	A=1.00
0.00	0.00000	.04928	.09941	.15132	.20614	.26544	.33151	.40820	.50305	.63550	1.00000
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	.04887	.09854	.14389	.20337	.26217	.32645	.39983	.48717	.59559	.71721
	.05760	.05408	.05936	.06222	.06636	.07257	.08198	.09684	.12252	.17435	.29649
.20	0.00000	.04767	.09602	.14577	.19776	.25299	.31261	.37800	.45006	.52666	.59537
	.11426	.11517	.11799	.12299	.13071	.14213	.15891	.18412	.22350	.28727	.35726
.30	0.00000	.04580	.09211	.13945	.18837	.23573	.29297	.34913	.41681	.46235	.50001
	.16913	.17039	.17427	.18110	.19150	.202	.22783	.25203	.30096	.36121	.44112
.40	0.00000	.04342	.08717	.13156	.17686	.22323	.27059	.31833	.36493	.40736	.44113
	.22152	.22302	.22764	.23570	.24777	.26479	.28807	.31939	.36084	.41409	.47884
.50	0.00000	.04071	.08158	.12274	.16424	.20600	.24766	.28843	.32690	.36095	.38795
	.27093	.27258	.27762	.28633	.29918	.31687	.34032	.37059	.40863	.45481	.50824
.60	0.00000	.03783	.07568	.11355	.15133	.18800	.22551	.26069	.29321	.32163	.34434
	.31757	.31876	.32397	.33285	.34578	.36323	.38576	.41392	.44804	.48798	.53278
.70	0.00000	.03492	.06976	.10441	.13870	.17232	.20482	.23554	.26361	.28805	.30784
	.35982	.3651	.36664	.37536	.38788	.40451	.42554	.45120	.48151	.51612	.56420
.80	0.00000	.03208	.06401	.09563	.12670	.15691	.18587	.21300	.23766	.25945	.27663
	.39920	.40083	.40575	.41406	.42538	.44137	.46066	.48377	.51058	.54070	.57342
.90	0.00000	.02937	.05657	.08737	.11555	.14279	.16073	.19292	.21487	.23409	.25014
	.43532	.43686	.44149	.44925	.46021	.47443	.49191	.51260	.53630	.56262	.59099
1.00	0.00000	.02685	.05350	.07973	.10531	.12991	.15332	.17507	.19403	.21224	.22697
	.46838	.46981	.47409	.48124	.49128	.50419	.51994	.53841	.55936	.58246	.60723

$$\begin{aligned} U/K+IV/K^2 \\ U+IV=SN^{-1}(A+IB) \end{aligned}$$

K=SIN 60

B	A=0.00	A=.10	A=.20	A=.30	A=.40	A=.50	A=.60	A=.70	A=.80	A=.90	A=1.0
0.00	0.00000	.04651	.09385	.14295	.19496	.2144	.31474	.36887	.46160	.61453	1.00000
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	.04610	.09298	.14153	.19279	.24815	.30960	.36024	.46512	.57157	.68379
	.05915	.05966	.06126	.06412	.06801	.07537	.08573	.10227	.13129	.19106	.32497
.20	0.00000	.04491	.09049	.13745	.18660	.23893	.29560	.35791	.42663	.49898	.56054
	.11729	.1826	.12129	.12667	.13502	.14741	.16576	.19355	.23738	.3093	.4211
.30	0.00000	.04307	.08664	.13120	.17729	.2253,	.27591	.32877	.38267	.43346	.47273
	.17350	.17485	.17900	.18633	.19752	.21373	.23682	.26970	.31664	.36252	.46906
.40	0.00000	.04074	.08178	.12343	.16593	.20940	.25369	.29811	.34097	.37905	.40773
	.22706	.22867	.23359	.24219	.25510	.27334	.29833	.33201	.37656	.43352	.50192
.50	0.00000	.03809	.07632	.11480	.15357	.19249	.23117	.26876	.30377	.33402	.35694
	.27745	.2721	.28455	.29380	.30745	.32627	.35121	.38337	.42367	.47228	.52784
.60	0.00000	.03529	.07058	.10586	.14100	.17575	.20963	.24185	.27126	.29641	.31581
	.32436	.32610	.33166	.34104	.35468	.37313	.39685	.42647	.46221	.50375	.54985
.70	0.00000	.03247	.06486	.09703	.12879	.15984	.18969	.21769	.24296	.26430	.28165
	.36772	.36950	.37488	.38403	.39716	.41459	.43658	.46334	.49480	.53048	.56938
.80	0.00000	.02974	.05933	.08959	.11728	.14508	.17158	.19622	.21839	.23743	.25276
	.40753	.40923	.41437	.42304	.43536	.45148	.47151	.49544	.52317	.55391	.58715
.90	0.00000	.02715	.05412	.08070	.10663	.13161	.15529	.17722	.19695	.21403	.22801
	.44393	.44553	.45033	.45339	.46975	.48446	.50251	.52380	.54807	.57488	.60358
1.00	0.00000	.02475	.04930	.07344	.09631	.11945	.14074	.16043	.17818	.19365	.20658
	.47716	.47863	.48305	.49043	.50076	.51463	.53025	.54914	.57050	.59392	.61890

$U/K+IV/K'$
 -1
 $U+IV = SN \quad (A+IB)$

K=SIN 65

	B	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
0.00	0.00003 0.00006	.04345 .00000	.08770 .01000	.13367 .00000	.19249 .00000	.23571 .00000	.29569 .00000	.36654 .00000	.45660 .00000	.58856 .00000	1.00000 .00000	
.10	0.00000 .06046	.04305 .06271	.08686 .06577	.13225 .07056	.18036 .07789	.23245 .06914	.29055 .10735	.35777 .13908	.43926 .20853	.57773 .37773	.65349 .231	
.20	0.00000 .11984	.04190 .12068	.08443 .12410	.12834 .12983	.17430 .13875	.22336 .15205	.27662 .17189	.33531 .20216	.39993 .25041	.46700 .32985	.52000 .45370	
.30	0.00000 .17719	.04011 .17862	.08069 .18301	.12223 .19079	.16521 .25269	.21309 .21999	.25720 .24473	.30638 .28011	.35609 .33073	.40160 .40160	.43463 .49374	
.40	0.00000 .23173	.03780 .23342	.07600 .23861	.11471 .24770	.15419 .26136	.19453 .26068	.23553 .30720	.27643 .34297	.31540 .39021	.34913 .45022	.37310 .52124	
.50	0.00000 .28292	.03534 .28476	.07074 .29036	.10639 .30009	.14227 .31445	.17821 .33424	.21379 .36047	.24812 .39425	.27970 .43643	.30634 .40692	.32566 .54391	
.60	0.00000 .33047	.03263 .33235	.06525 .33808	.09783 .34789	.13023 .36215	.16219 .38139	.19319 .40617	.22246 .43699	.24886 .47402	.27099 .51675	.28752 .56369	
.70	0.00000 .37429	.02995 .37614	.05980 .38174	.08942 .39124	.11861 .40490	.14705 .42293	.17427 .44577	.19962 .47340	.22228 .50575	.24133 .54220	.25599 .58161	
.80	0.00000 .41442	.02736 .41613	.05456 .42150	.08142 .43047	.10771 .44320	.13311 .45384	.15720 .48047	.17946 .50503	.19331 .53327	.21613 .56461	.22942 .59816	
.90	0.00000 .45103	.02492 .45267	.04965 .45762	.07398 .46592	.09769 .47760	.12045 .49271	.14196 .51120	.16172 .53294	.17938 .55763	.19448 .58476	.20671 .61344	
1.00	0.00000 .48436	.02266 .48587	.04512 .49041	.06710 .49757	.08858 .50857	.10909 .52216	.12836 .53865	.14611 .55706	.16261 .57950	.17574 .60314	.18709 .62632	

$U/K + IV/K'$
 \sim_1
 $U+IV=SN \quad (A+IB)$

K=SIN 70

	B	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
0.00	0.00000	.04005	.08008	.12335	.16854	.21798	.27398	.34065	.42656	.55585	.60000	.60000
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	.03967	.08006	.12202	.16649	.21482	.26895	.33194	.40886	.50673	.60649	.62162
	.06153	.06211	.06390	.06713	.07223	.08002	.09210	.11191	.14793	.22592	.42162	
.20	0.00000	.03858	.07776	.11021	.16057	.20604	.25538	.30981	.36961	.43052	.47452	
	.12194	.12303	.12641	.13245	.14187	.15600	.17716	.20974	.26206	.34863	.48159	
20	.30	0.00000	.03688	.07421	.11242	.15198	.19330	.23265	.28175	.32693	.36739	.39434
	.18020	.18170	.18631	.19447	.0699	.022524	.025143	.028899	.034280	.041781	.051420	
.40	0.00000	.03475	.06976	.10528	.14150	.17646	.21594	.25312	.28613	.31769	.33755	
	.23553	.23729	.24272	.25221	.26651	.28676	.31459	.35212	.40157	.46393	.53668	
.50	0.00000	.03234	.06479	.09742	.13022	.16302	.19538	.22639	.25457	.27786	.29610	
	.26736	.28927	.29512	.30523	.32017	.34073	.36808	.40316	.44683	.49871	.55561	
.60	0.00000	.02982	.05963	.08937	.11691	.14796	.17604	.20237	.22587	.24524	.25930	
	.33540	.33735	.34329	.35344	.36622	.36812	.4374	.44551	.45353	.52711	.57456	
.70	0.00000	.02731	.05452	.08150	.10804	.13383	.15641	.18115	.20130	.21802	.23062	
	.37958	.38148	.38726	.39707	.41113	.42975	.45316	.46146	.51446	.55147	.59117	
.80	0.00000	.02490	.04964	.07405	.09789	.12067	.14257	.16253	.18017	.19497	.20649	
	.41995	.42176	.42723	.43643	.44950	.46655	.48764	.51268	.54136	.57304	.60676	
.90	0.00000	.02263	.04508	.06715	.08850	.10916	.12849	.14620	.16191	.17523	.18590	
	.45671	.45839	.46346	.47194	.48387	.49928	.51611	.54019	.55517	.59252	.62149	
1.00	0.00000	.02054	.04090	.06086	.08020	.09854	.11601	.13190	.14604	.15818	.16813	
	.49165	.49627	.50398	.51477	.52858	.54531	.56476	.58659	.61035	.63547		

$U/K + IV/K'$
 -1
 $U+IV=SN^{-1} (A+B)$

K=SIN 75

B	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
0.00	0.00000	*03624	*07321	*11170	*15273	*19774	*24895	*31035	*39041	*51411	*76060
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	*03589	*07246	*11046	*15081	*19477	*24417	*30194	*37294	*45339	*54829
	.06237	.06297	.06464	.06820	.07354	.08173	.09454	.11575	.15497	.24197	.46123
.20	0.00000	*03487	*07031	*10691	*14537	*18652	*23133	*28079	*33495	*38902	*42461
	.12357	.12470	.12821	.13450	.14435	.15914	.18143	.21596	.27179	.36433	.50368
.30	0.00000	*03330	*06761	*10153	*13727	*17461	*21375	*25436	*29467	*32990	*35179
	.18254	.18409	.1887	.19735	.21037	.22940	.25677	.29613	.35252	.43066	.52841
.40	0.00000	*03133	*06290	*09492	*12756	*16084	*19450	*22772	*25869	*28427	*30066
	.23847	.24029	.24591	.25573	.27054	.29153	.32041	.35934	.41049	.47455	.54835
.50	0.00000	*02911	*05632	*08767	*11716	*14653	*17552	*20310	*22792	*24808	*26166
	.29079	.29275	.29678	.30921	.32462	.34587	.37401	.41012	.45468	.50773	.56616
.60	0.00000	*02680	*05356	*08028	*10676	*13276	*15780	*18115	*20181	*21861	*23053
	.33920	.34121	.34730	.35773	.37290	.39333	.41958	.45208	.49011	.53497	.58270
.70	0.00000	*02450	*04890	*07308	*09682	*11985	*14172	*15186	*17956	*19412	*20469
	.36364	.36559	.39151	.40154	.41593	.43497	.45884	.48766	.52113	.55847	.59632
.80	0.00000	*02230	*04445	*06628	*08756	*10806	*12735	*14499	*16051	*17341	*18335
	.42419	.42604	.43161	.44100	.45432	.47167	.49310	.51850	.54748	.57738	.61318
.90	0.00000	*02024	*04030	*06001	*07915	*09745	*11460	*13027	*14408	*15573	*16497
	.46105	.46276	.46791	.47653	.48866	.50430	.52337	.54569	.57067	.59835	.62735
1.00	0.00000	*01834	*03651	*05431	*07155	*08797	*10334	*12984	*14048	*14913	*14989
	.49605	.49646	.50074	.50856	.51946	.53346	.55036	.56497	.59193	.61577	.64389

$U/K + IV/K'$
 -1
 $I + IV = SN$ (A + IB)

K=SIN 80

B	A=0.00	A=.10	A=.20	A=.30	A=.40	A=.50	A=.60	A=.70	A=.80	A=.90	A=1.00
0.00	U.00000 0.00000	.03102 .00000	.06428 .00000	.09811 .00000	.13422 .00000	.17392 .00000	.21923 .00000	.27384 .00000	.34576 .00000	.45945 .00000	1.00000 .00000
.10	0.00000 .06297	.03150 .06355	.06361 .06551	.09699 .06998	.13249 .07449	.17123 .08293	.21497 .09635	.26609 .11867	.32933 .16049	.40980 .25510	.47875 .49146
.20	0.00000 .12473	.03059 .12590	.06160 .12951	.09381 .13598	.12750 .14614	.16378 .16444	.20322 .18456	.24676 .22061	.29627 .27912	.34065 .37609	.36912 .51937
.30	0.00000 .18423	.02919 .18580	.05874 .19071	.08900 .19941	.12034 .21281	.15301 .23242	.18738 .26067	.22207 .30135	.25784 .35963	.28781 .43997	.30541 .53905
.40	0.00000 .24056	.02743 .24243	.05007 .24818	.08310 .25425	.11167 .27343	.14077 .29497	.17015 .32460	.19903 .36544	.22574 .41689	.24743 .48209	.26083 .55647
.50	0.00000 .29222	.02540 .29524	.05100 .30139	.07666 .31204	.10241 .32779	.1280d .34951	.15326 .37825	.17716 .4150A	.19851 .45059	.21562 .51407	.22689 .57279
.60	0.00000 .34190	.02341 .34394	.04679 .35015	.07010 .36978	.09319 .37623	.11582 .39701	.13757 .42373	.1577b .45672	.17552 .49544	.19979 .54047	.213931 .58835
.70	0.00000 .38652	.02137 .39451	.04266 .36850	.06373 .39451	.08440 .40471	.10442 .41932	.12351 .43863	.14078 .46285	.15600 .49201	.16840 .52579	.17750 .56335
.80	0.00000 .42718	.01943 .42505	.03873 .43471	.05773 .44423	.07625 .45772	.09403 .47521	.11074 .49695	.12598 .52258	.13932 .55177	.15035 .58360	.15878 .61764
.90	0.00000 .46410	.01761 .46584	.03508 .47105	.05222 .47977	.06814 .49203	.08471 .50787	.09956 .52706	.11308 .54953	.12497 .57485	.13495 .60241	.14282 .63142
1.00	0.00000 .42756	.01595 .49914	.03174 .50365	.04721 .51177	.06217 .52279	.07641 .53681	.08970 .55390	.10183 .57361	.11255 .59566	.12167 .61954	.12906 .64465

$U/K+IV/K'$
 -1
 $U+IV=SN$ $(A+IB)$

K=SIN 65

B	A=0.00	A=.10	A=.20	A=.30	A=.40	A=.50	A=.60	A=.70	A=.80	A=.90	A=1.00
.10	0.00000	.02618	.05291	.08077	.11054	.14339	.18078	.22610	.26616	.30262	.36262
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
	0.06333	.02592	.05235	.07384	.10909	.14104	.17710	.21952	.27202	.33070	.39191
	.06396	.06591	.06945	.07507	.06376	.09747	.12050	.16403	.26373	.50981	
	0.00000	.02517	.05075	.07719	.10501	.13481	.16732	.20321	.24227	.28009	.30180
	.12543	.12661	.13029	.13688	.14722	.16264	.18652	.22347	.26368	.30335	.52866
	.18521	.02400	.04829	.07318	.09896	.12569	.15408	.18320	.21175	.23592	.24960
	.18683	.19181	.20066	.21428	.23424	.26304	.30453	.36395	.44556	.54532	
	0.00000	.02254	.04525	.06826	.09174	.11562	.13973	.16336	.19509	.20256	.21310
	.24182	.24372	.24955	.25976	.27517	.29704	.32713	.36768	.42074	.48558	.56126
.50	0.00000	.02091	.04187	.06293	.08406	.10511	.12572	.14523	.16258	.17637	.18532
	.29468	.29672	.30295	.31374	.32970	.35169	.38079	.41604	.46399	.51783	.57669
	0.00000	.01921	.03639	.05750	.07643	.09496	.11274	.12921	.14363	.15517	.16315
	.34351	.34557	.35185	.36260	.37822	.39924	.42621	.45950	.49899	.54372	.59168
	0.00000	.01752	.03497	.05223	.06917	.08554	.10103	.11522	.12758	.13761	.14492
	.38623	.39024	.39631	.40660	.42135	.44082	.46523	.49460	.52656	.56624	.60620
	0.00000	.01592	.03173	.04729	.06245	.07698	.09062	.10304	.11368	.12282	.12960
	.42896	.43085	.43655	.44615	.45974	.47744	.49924	.52500	.55431	.58641	.62025
	0.00000	.01442	.02672	.04274	.05634	.06930	.08142	.09244	.10211	.11020	.11655
	.46592	.46767	.47292	.48170	.49403	.50991	.52925	.55181	.57720	.60480	.63381
1.00	0.00000	.01305	.02597	.03362	.05085	.06243	.07333	.08320	.09192	.09933	.10531
	.50098	.50575	.51368	.52476	.53691	.55599	.57577	.59785	.62176	.64685	

$U/K + IV/K'$
 -1
 $U+IV=SN^- (A+IB)$

K=SIN 86

B	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
0.00	0.00000	.02476	.05002	.07637	.10452	.13550	.17096	.21385	.27074	.36229	.40000
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	.02451	.04949	.07549	.10315	.13337	.16748	.20761	.25730	.32039	.37026
	.06337	.06400	.06596	.06950	.07514	.08386	.09760	.12072	.16447	.26480	.51201
.20	0.00000	.02379	.04793	.07298	.09928	.12746	.15821	.19214	.22906	.26476	.26511
	.12552	.12670	.13038	.13698	.14735	.16301	.18675	.22382	.28423	.38423	.52976
.30	0.00000	.02269	.04566	.06918	.09355	.11901	.14566	.17318	.20015	.22294	.23576
	.18533	.18695	.19194	.20081	.21446	.23446	.26332	.30492	.36447	.46624	.54607
.40	0.00000	.02131	.04277	.06454	.08672	.10930	.13207	.15440	.17491	.19139	.20130
	.24197	.24387	.24971	.25994	.27538	.29729	.32744	.36805	.42120	.48711	.56102
.50	0.00000	.01976	.03958	.05948	.07945	.09934	.11082	.13725	.15362	.16663	.17505
	.29486	.29690	.30314	.31394	.32992	.35195	.38109	.41840	.46440	.51828	.57716
.60	0.00000	.01815	.03628	.05434	.07223	.08974	.10654	.12209	.13570	.14659	.15411
	.34370	.34577	.35205	.36281	.37846	.39251	.42651	.45983	.49935	.54411	.59207
.70	0.00000	.01656	.03305	.04936	.06536	.08083	.09546	.10886	.12053	.12999	.13688
	.30844	.39044	.39652	.40662	.42159	.44108	.46552	.49490	.52069	.56658	.60655
.80	0.00000	.01504	.02998	.04468	.05900	.07274	.08562	.09735	.10758	.11601	.12241
	.42917	.43107	.43676	.44638	.45999	.47764	.49951	.52529	.55461	.58672	.62057
.90	0.00000	.01363	.02713	.04038	.05323	.06548	.07693	.08733	.09646	.10409	.11099
	.46614	.46789	.47314	.46193	.49427	.51016	.52951	.55209	.57748	.60508	.63409
1.00	0.00000	.01233	.02454	.03649	.04804	.05902	.06927	.07860	.08683	.09382	.09946
	.49961	.50120	.51391	.52499	.53917	.55624	.57602	.59812	.62202	.64712	

$U/K + IV/K'$
 -1
 $U + IV = SN \quad (1 + 'B)$

K=SIN 87

B	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
.00	0.00000	.02313	.04673	.07134	.09704	.12651	.15972	.19982	.25304	.33881	.1.00000
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
	.10	0.00000	.02289	.04523	.07051	.09635	.12451	.15646	.19397	.24043	.29940
	.06341	.06404	.06600	.06955	.07520	.08393	.09771	.12089	.16481	.26555	.51371
	.20	0.00000	.02222	.04481	.06817	.09274	.11907	.14779	.17949	.21397	.24727
	.12558	.12677	.13045	.13707	.14745	.16314	.18633	.22409	.28467	.38492	.53062
	.30	0.00060	.02119	.04264	.06462	.08738	.11116	.13605	.16175	.19693	.20817
	.18543	.18704	.19205	.20092	.21460	.23463	.26354	.30521	.36486	.44676	.54655
	.40	0.00000	.01990	.03995	.06028	.08039	.10208	.12335	.14418	.16333	.17869
	.24399	.24399	.24984	.26908	.27554	.29748	.32767	.36835	.42156	.48753	.56227
	.50	0.00000	.01645	.03696	.05555	.07420	.09277	.11095	.12616	.14343	.15556
	.29499	.29704	.3032%	.31410	.33010	.3521%	.3833	.41868	.46472	.51863	.57752
.60	0.00000	.01695	.03388	.05075	.06745	.08380	.09848	.11399	.12669	.13685	.14385
	.34385	.34592	.35221	.36298	.37664	.39971	.42674	.46009	.49964	.54441	.59238
	.70	0.00000	.01546	.03086	.04609	.06103	.07547	.08913	.10163	.11252	.12135
	.38860	.39060	.39669	.40700	.42178	.44124	.46574	.49514	.52914	.56685	.60382
.80	0.00000	.01405	.02799	.04172	.05509	.06791	.07994	.09086	.10043	.10829	.11426
	.43123	.43695	.44656	.46017	.47789	.49973	.52552	.55484	.58696	.62081	.66081
	.90	0.00000	.01272	.02533	.03770	.04969	.06113	.07131	.08153	.09504	.10275
1.00	.46631	.46805	.47331	.48210	.49446	.51036	.52971	.55230	.57770	.60530	.63432
	.49978	.50137	.50614	.51409	.52518	.53934	.55644	.57522	.59632	.62223	.64732

$U/K + IV/K$
 -1
 $U+IV=SN$ (A+IB)

K=SIN 88

B	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
0.00	0.00000	.02116	.04275	.06526	.08932	.11581	.14613	.18264	.23157	.31021	1.00000
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	.02094	.04229	.06451	.08615	.11393	.14315	.17747	.22000	.27396	.31607
	.06343	.06406	.06603	.06958	.07524	.08393	.09779	.12102	.16505	.26625	.51493
.20	0.00000	.02033	.04100	.06236	.08434	.10893	.13520	.16421	.19575	.22616	.26336
	.12563	.12682	.13051	.13713	.14753	.16324	.18706	.22429	.26498	.30541	.53124
.30	0.00000	.01936	.03901	.05111	.07933	.10163	.12445	.14796	.17098	.19038	.20125
	.16549	.18711	.19212	.20101	.21476	.23476	.26370	.30543	.36517	.44713	.54706
.40	0.00000	.01620	.03654	.05514	.07409	.09337	.11262	.13188	.14938	.16340	.17181
	.24217	.24407	.24993	.26016	.27566	.29762	.32784	.36856	.42182	.48783	.56256
.50	0.00000	.01683	.03381	.05081	.06787	.08468	.10148	.11721	.13117	.14225	.14941
	.29509	.29714	.30339	.31422	.33123	.35232	.38150	.41867	.46495	.51886	.57777
.60	0.00000	.01550	.03099	.04641	.06169	.07664	.09096	.10425	.11586	.12513	.13153
	.34596	.34603	.35233	.36311	.37676	.39986	.42690	.46027	.4984	.54462	.59260
.70	0.00000	.01414	.02022	.04245	.05531	.06902	.08151	.09294	.10269	.11096	.11682
	.38871	.39072	.39681	.40713	.42191	.44143	.46590	.49332	.52933	.55704	.60701
.80	0.00000	.01284	.02560	.03916	.05038	.06210	.07310	.08310	.09183	.09902	.10447
	.42946	.43135	.43707	.44668	.46031	.47604	.49983	.52568	.55501	.58713	.62098
.90	0.00000	.01164	.02317	.03468	.04544	.05590	.06567	.07455	.08233	.08884	.09394
	.46643	.46816	.47344	.48223	.49459	.51050	.52986	.55245	.57785	.60546	.63447
1.00	0.00000	.01053	.02095	.03115	.04101	.05038	.05913	.06709	.07411	.08007	.08468
	.49990	.50149	.50627	.51212	.52531	.53943	.55658	.57637	.59847	.62237	.64747

$U/K + IV/K'$
 \sim_1
 $U + IV = SN \quad (A + IB)$

K=SIN 89

	A=0.00	A=.10	A=.20	A=.30	A=.40	A=.50	A=.60	A=.70	A=.80	A=.90	A=1.00
0.00	0.00000	.01846	.03730	.05695	.07795	.10107	.12753	.15957	.20212	.27084	1.00000
	0.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.10	0.00000	.01828	.03691	.05629	.07632	.09947	.12492	.15489	.19201	.23911	.27574
	.06345	.06408	.06604	.06960	.07526	.08401	.09783	.12109	.16520	.26662	.51566
.20	0.00000	.01774	.03577	.05442	.07403	.09505	.11798	.14330	.17082	.19736	.21231
	.12566	.12604	.13054	.13716	.14757	.16329	.18714	.22440	.28516	.38570	.53160
.30	0.00000	.01692	.03404	.05158	.06975	.08673	.10860	.12911	.14919	.16611	.17557
	.16553	.18715	.19216	.20108	.21476	.23483	.26380	.30556	.36534	.44736	.54731
.40	0.00000	.01588	.03188	.04811	.06465	.08144	.09844	.11507	.13033	.14255	.14988
	.24222	.24413	.24998	.26024	.27573	.29770	.32795	.36868	.42197	.48801	.56277
.50	0.00000	.01473	.02950	.04433	.05922	.07404	.08854	.10226	.11444	.12419	.13034
	.29515	.29719	.30345	.31428	.33030	.35239	.38160	.41899	.46500	.51903	.57793
.60	0.00000	.01353	.02704	.04050	.05382	.06687	.07938	.09095	.10108	.10917	.11474
	.34402	.34609	.35239	.36318	.37885	.39995	.42700	.46038	.49996	.54475	.59273
.70	0.00000	.01234	.02462	.03678	.04879	.06022	.07112	.08108	.08976	.09680	.10191
	.38878	.39079	.39686	.40720	.42199	.44152	.46599	.49542	.52944	.56716	.60713
.80	0.00000	.01121	.02233	.03329	.04396	.05418	.06377	.07250	.08011	.08638	.09113
	.42953	.43143	.43714	.44676	.46039	.47812	.49997	.52577	.55511	.56724	.62108
.90	0.00000	.01015	.02021	.03008	.03965	.04877	.05729	.06533	.07182	.07750	.08195
	.46650	.46825	.47351	.48231	.49467	.51053	.52994	.55254	.57795	.60556	.63457
1.00	0.00000	.00919	.01828	.02718	.03578	.04396	.05159	.05653	.06465	.06985	.07404
	.49998	.50157	.50634	.51429	.52538	.53956	.55666	.57645	.59855	.62246	.64755

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN S

B	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.00	.71239 .00000	.72738 .00000	.74319 .00000	.75997 .00000	.77796 .00000	.79747 .00000	.81900 .00000	.84338 .00000	.8723 .00000	.90972 .00000	1.00000 .00000
.01	.71205 .00600	.72697 .00631	.74270 .00667	.75938 .00711	.77721 .00765	.79643 .00835	.81764 .00928	.84130 .01063	.86854 .01279	.90085 .01691	.93627 .02622
.02	.71102 .01195	.72577 .01255	.74127 .01326	.75764 .01411	.77504 .01515	.79368 .01645	.81381 .01819	.83575 .02055	.85971 .02398	.88528 .02923	.90994 .03711
.03	.70936 .01763	.72383 .01970	.73898 .01972	.75488 .02093	.77164 .02239	.78931 .02419	.80819 .02648	.82810 .02945	.84894 .03340	.87000 .03666	.88979 .04548
.04	.70710 .02359	.72212 .02470	.73593 .02749	.75126 .02959	.76727 .02929	.78399 .03145	.80142 .03410	.81945 .03736	.83780 .04147	.85588 .04653	.87285 .05256
.05	.70433 .02921	.71806 .03052	.73226 .03204	.74696 .03376	.76217 .03582	.77788 .03823	.79402 .04109	.81044 .04450	.82687 .04857	.84288 .05334	.85796 .05381
.06	.70112 .03467	.71441 .03616	.72808 .03785	.74214 .0378	.75657 .04200	.77132 .04456	.78632 .04753	.80140 .05097	.81633 .05493	.83382 .05945	.84453 .06448
.07	.69753 .03997	.71037 .04160	.72352 .04343	.73695 .04549	.75063 .04763	.76452 .05048	.77851 .05349	.79248 .05630	.80623 .06075	.81956 .06502	.83221 .06979
.08	.69364 .04509	.70603 .04683	.71866 .0487	.73149 .05193	.74449 .05334	.75760 .05604	.77073 .05906	.78377 .06241	.79656 .06612	.80696 .07018	.82073 .07457
.09	.68950 .05005	.70146 .05188	.71359 .05369	.72586 .05611	.73824 .05857	.75066 .06123	.76304 .06428	.77529 .06756	.78730 .07114	.79853 .07501	.81007 .07915
.10	.68517 .05484	.69671 .05673	.70837 .05880	.72013 .06107	.73134 .06354	.74375 .06622	.75546 .06920	.76706 .07241	.77840 .07566	.78997 .07956	.79997 .08350

$U/K + IV/K'$
 -1
 $IV + I = SN \quad \{A + H\}$

K=SIN 10

B	A= .90	A= .91	A= .92	A= .93	A= .94	A= .95	A= .96	A= .97	A= .98	A= .99	A= 1.00
0.00	.71095	.72599	.74186	.75671	.77678	.79634	.81801	.84251	.87151	.90921	.00000
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.01	.71060	.72558	.74137	.75612	.77633	.79537	.81694	.84042	.86779	.90029	.93589
	.00736	.00773	.00818	.00872	.00939	.01025	.01140	.01306	.01572	.02078	.03222
.02	.70957	.72437	.73993	.75637	.77384	.79255	.81279	.83483	.85891	.88462	.90941
	.01466	.01540	.01627	.01732	.01860	.02021	.02233	.02524	.02946	.03591	.04561
.03	.70789	.72242	.73762	.75358	.77042	.78823	.80712	.82713	.84867	.86923	.88913
	.02106	.02294	.02419	.02568	.02748	.02973	.03251	.03617	.04103	.04753	.05590
.04	.70562	.71980	.73455	.74994	.76601	.78280	.80031	.81843	.83686	.85503	.87207
	.02893	.03030	.03108	.03374	.03595	.03861	.04187	.04591	.05094	.05716	.06459
.05	.70263	.71660	.73085	.74560	.76037	.77667	.79246	.80535	.82545	.84154	.05705
	.03582	.03744	.03930	.04145	.04397	.04693	.05045	.05465	.05965	.06553	.07226
.06	.69959	.71292	.72664	.74075	.75523	.77004	.78510	.80024	.81524	.82979	.84356
	.04251	.04435	.04663	.04861	.05154	.05470	.05835	.06259	.06747	.07302	.07922
.07	.69597	.70885	.72203	.73551	.74925	.76313	.77724	.79126	.80507	.81844	.83125
	.04901	.05102	.05327	.05582	.05869	.06195	.06567	.06987	.07460	.07986	.08552
.08	.69204	.70447	.71714	.73001	.74306	.75622	.76939	.78248	.79532	.80776	.81963
	.05529	.05744	.05902	.06248	.06566	.06873	.07249	.07663	.08119	.08619	.09160
.09	.68787	.69986	.71203	.72434	.73675	.74922	.76164	.77394	.78598	.79766	.80864
	.06136	.06362	.06610	.06884	.07197	.07521	.07890	.08294	.08735	.09212	.09722
.10	.68350	.69507	.70677	.71856	.73040	.74225	.75402	.76564	.77702	.78805	.79865
	.06724	.06957	.07212	.07451	.07797	.08139	.08494	.08889	.09314	.09771	.10255

U/K+IV/K'
-1
U+IV=SN (A+B)

K=SIN 15

B	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
-0.00	.70650 .00000	.72364 .00000	.73961 .00000	.75658 .00000	.77476 .00000	.79451 .00000	.81633 .00000	.84104 .00000	.87026 .00000	.90335 .00000	.100000 .00000
.01	.70815 .00851	.72322 .00895	.73911 .00947	.75597 .01010	.77401 .01088	.79355 .01183	.81494 .01322	.83892 .01515	.86653 .01624	.89931 .01842	.93526 .03742
.02	.70710 .01696	.72200 .01783	.73766 .01864	.75420 .02006	.77130 .02155	.79065 .02343	.81105 .02509	.83327 .02927	.85756 .03418	.88348 .04169	.90850 .05295
.03	.70540 .02536	.72002 .02655	.73532 .02801	.75138 .02974	.76833 .03134	.78627 .03442	.80531 .03770	.82548 .04195	.84659 .04761	.86793 .05517	.88800 .06489
.04	.70310 .03347	.71736 .03506	.73220 .03691	.74769 .03908	.76387 .04165	.78074 .04477	.79842 .04854	.81607 .05324	.83525 .05910	.85357 .06634	.87075 .07498
.05	.70027 .04144	.71412 .04333	.72845 .04550	.74330 .04801	.75867 .05093	.7745 .05433	.79088 .05649	.80749 .06338	.82412 .06920	.84032 .07604	.85552 .08387
.06	.69698 .04918	.71039 .05132	.72419 .05375	.73838 .05552	.75295 .05970	.76782 .06333	.78302 .06764	.79827 .07257	.81337 .07625	.82803 .08472	.84190 .09193
.07	.69332 .05669	.70626 .05903	.71552 .06106	.73307 .06463	.74689 .06798	.76092 .07172	.77505 .07611	.78917 .08101	.80307 .08552	.81654 .09254	.82934 .09935
.08	.68933 .06395	.70182 .06445	.71455 .06924	.72750 .07234	.74062 .07581	.75387 .07961	.77711 .08461	.78028 .08883	.79321 .09415	.80573 .09926	.81767 .10627
.09	.68510 .07097	.69715 .07360	.70937 .07650	.72175 .07969	.73423 .08323	.74672 .08712	.75926 .09142	.77162 .09613	.78374 .10127	.79549 .10683	.80674 .11276
.10	.68067 .07775	.69227 .08043	.70404 .08346	.71588 .08571	.72779 .09028	.73961 .09417	.75153 .09841	.76321 .10301	.77465 .10798	.78575 .11330	.79641 .11895

$U/K \approx IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 20

B	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.00	.70499 .00000	.72025 .00000	.73637 .00000	.75350 .00000	.77169 .00000	.79165 .00000	.81390 .00000	.83890 .00000	.86852 .00000	.90707 .00000	1.00600 .00000
.01	.70463 .00962	.71983 .01012	.73586 .01071	.75289 .01143	.77111 .01232	.79063 .01345	.81249 .01498	.83675 .01718	.86471 .02070	.89791 .02738	.93434 .04251
.02	.70356 .01916	.71858 .02015	.73428 .02130	.75108 .02269	.76086 .02439	.78792 .02654	.80853 .02935	.83101 .03319	.85559 .03678	.88184 .04732	.90718 .06014
.03	.70183 .02857	.71656 .03000	.73200 .03167	.74822 .03365	.75533 .03604	.76346 .03899	.780270 .04272	.802310 .04756	.84446 .05400	.86605 .06261	.88676 .07317
.04	.69946 .03780	.71386 .03952	.72883 .04173	.74445 .0420	.76079 .04714	.77787 .05067	.79569 .05560	.8114 .06036	.83293 .06703	.85145 .07527	.86883 .08511
.05	.69659 .04680	.71055 .04896	.72500 .05144	.73998 .05430	.75549 .05764	.77153 .06154	.78601 .06625	.80480 .07183	.82160 .07847	.83799 .08526	.85341 .09519
.06	.69324 .05554	.70675 .05799	.72065 .06076	.73497 .06392	.74957 .06756	.76472 .07175	.78002 .07561	.79541 .08224	.81057 .08872	.82546 .09609	.83949 .10431
.07	.69950 .06401	.70254 .06669	.71590 .06969	.72956 .07308	.74349 .07691	.75764 .08125	.77191 .08519	.78615 .09178	.80019 .09806	.81379 .10505	.82671 .11271
.08	.68543 .07220	.69301 .07507	.71063 .07825	.72388 .08179	.73710 .08575	.75044 .09313	.76321 .09512	.77710 .10062	.79014 .10570	.80277 .11335	.81482 .12053
.09	.68111 .08012	.69324 .08312	.70554 .08644	.71801 .09009	.73058 .09413	.74321 .09854	.75581 .10349	.76827 .10888	.78049 .11475	.79234 .12109	.80368 .12789
.10	.67658 .08776	.68827 .09088	.70010 .09429	.71242 .09801	.72401 .10209	.73600 .10653	.74792 .11138	.75970 .11664	.78241 .12232	.79315 .12839	.813485

$U/K + IV/K'$
 -1
 $IV = SN \quad (A+IB)$

K=SIN 25

	B	A=.90	A=.91	A=.92	A=.93	A=.94	A=.95	A=.96	A=.97	A=.98	A=.99	A=1.00
0.00	.70031	.71574	.73204	.74939	.76602	.7827	.81065	.83604	.86614	.89536	.90000	.90000
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.01	.69994	.71531	.73153	.74676	.76723	.78723	.80920	.83384	.86226	.89603	.93310	.93310
	.01073	.01130	.01197	.01276	.01379	.01507	.01680	.01927	.02324	.03077	.04780	.04780
.02	.69884	.71403	.73001	.74692	.76492	.78424	.80516	.82798	.85295	.87964	.90539	.90539
	.02136	.02250	.02361	.02538	.02730	.02973	.03289	.03724	.04353	.05316	.06760	.06760
.03	.69706	.71196	.72756	.74398	.76132	.77968	.79920	.81990	.84158	.86351	.88415	.88415
	.03188	.03350	.03539	.03763	.04033	.04366	.04737	.05334	.06061	.07031	.08280	.08280
.04	.69465	.70918	.72432	.74013	.75666	.77395	.79203	.81074	.82980	.84860	.86624	.86624
	.04218	.04424	.04663	.04943	.05274	.05674	.06163	.06768	.07521	.08451	.093562	.093562
.05	.69169	.70579	.72040	.73554	.75124	.76747	.78417	.80118	.81622	.83483	.85048	.85048
	.05221	.05466	.05747	.06071	.06449	.0685	.07422	.08053	.08802	.09683	.10691	.10691
.06	.68825	.70189	.71594	.73040	.74527	.76630	.77558	.79158	.80703	.82204	.83623	.83623
	.06195	.06473	.06787	.07145	.07557	.08031	.08581	.09217	.09949	.10783	.11712	.11712
.07	.68441	.69757	.71105	.72486	.73894	.75325	.76768	.78209	.79630	.81006	.82314	.82314
	.07139	.07443	.07783	.08167	.08601	.09093	.09652	.10284	.10995	.11765	.12651	.12651
.08	.68023	.69292	.70586	.71902	.73238	.74586	.75938	.77281	.78598	.79877	.81096	.81096
	.08051	.08376	.08737	.09139	.09538	.10067	.10649	.11271	.11959	.12712	.13525	.13525
.09	.67579	.68801	.70043	.71300	.72569	.73841	.75116	.76376	.77610	.78807	.79953	.79953
	.08932	.09274	.09650	.10964	.11522	.11027	.11583	.12193	.12658	.13577	.14346	.14346
.10	.67114	.68291	.69483	.70686	.71894	.73104	.74307	.75496	.76659	.77788	.78873	.78873
	.09763	.10137	.10524	.10946	.11408	.11913	.12462	.13059	.13702	.14391	.15123	.15123

$U/K + IV/K^*$
 $U+IV=SN$ -2
 $\{A+18\}$

$K = \sin 30$									
B	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98
0.00	.69432 .00000	.70935 .00000	.72650 .00000	.74412 .00000	.76305 .00000	.78366 .00000	.80645 .00000	.83235 .00000	.86308 .00000
.01	.69393 .01190	.70951 .01254	.72597 .01330	.74347 .01421	.76224 .01535	.78253 .01679	.80497 .01873	.83007 .02152	.85909 .02597
.02	.69280 .02371	.70819 .02497	.72440 .02645	.74157 .02822	.75936 .03039	.77952 .03312	.80081 .03668	.82407 .04157	.84954 .04855
.03	.69097 .03535	.70606 .03717	.72188 .03931	.73854 .04183	.75614 .04488	.77482 .04861	.79468 .05338	.81576 .05954	.83785 .06771
.04	.68848 .04675	.70319 .04908	.71853 .05178	.73456 .05494	.75135 .05668	.76693 .06311	.78730 .06870	.80834 .07551	.82574 .08400
.05	.68542 .05786	.69969 .06063	.71448 .06380	.72984 .06746	.74576 .07173	.76224 .07676	.77921 .08272	.79650 .09682	.81383 .09827
.06	.68186 .06865	.69566 .07173	.70988 .07534	.72453 .07739	.73961 .08403	.75505 .08934	.77077 .09559	.78660 .10277	.80231 .11103
.07	.67789 .07909	.69119 .08252	.70484 .08638	.71881 .09072	.73307 .09562	.74757 .10111	.76220 .10749	.77682 .11462	.79124 .12265
.08	.67357 .08917	.68636 .09285	.69946 .09693	.71278 .10148	.72630 .10656	.73991 .11222	.75364 .11855	.76724 .12558	.78061 .13335
.09	.66998 .09891	.68131 .10277	.69385 .10703	.70555 .11172	.71939 .11670	.73229 .12261	.74515 .12890	.75790 .13579	.77040 .14331
.10	.66416 .10830	.67683 .11231	.68806 .11669	.70020 .12147	.71241 .12673	.72463 .13241	.73679 .13863	.74880 .14538	.76057 .15266

$U/K + IV/K'$
 -1
 $U+IV=SW \quad (A+B)$

K=SIN 35

		A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.00		.68683 .00000	.70272 .00000	.71955 .00000	.73750 .00000	.75631 .00000	.77784 .00000	.80116 .00000	.82767 .00000	.85949 .00000	.9036 .00000	1.00000 .00000
.01		.68644 .01315	.70226 .01368	.71900 .01473	.73682 .01577	.75596 .01704	.77673 .01861	.79962 .02087	.82534 .02400	.85507 .02901	.89049 .03651	.92943 .05995
.02		.68526 .02620	.70083 .02762	.71737 .02950	.73485 .03130	.75350 .03315	.77356 .03683	.79532 .04085	.81911 .04635	.84521 .05432	.87314 .06648	.90042 .08471
34		.68335 .03905	.69867 .04112	.71475 .04354	.73170 .04039	.74964 .04983	.76863 .05407	.78897 .05943	.81051 .06637	.83312 .07558	.85603 .08786	.87759 .10366
.04		.68076 .05164	.69569 .05429	.71127 .05734	.72758 .06091	.74467 .06514	.76251 .07023	.78132 .07645	.80076 .08414	.82059 .09371	.84016 .10550	.85895 .11953
.05		.67758 .06390	.69204 .06704	.70706 .07063	.72266 .07477	.73886 .07960	.75561 .08528	.771292 .09201	.79056 .10004	.80824 .10957	.82549 .12077	.841174 .133358
.06		.67368 .07560	.68785 .07935	.70227 .08338	.71715 .08796	.73246 .09322	.74811 .09926	.76416 .10629	.78029 .11440	.79029 .12374	.81182 .13436	.82652 .14620
.07		.66974 .08730	.68320 .09120	.69703 .09556	.71119 .10548	.72567 .10603	.74031 .11233	.75526 .11946	.77013 .12754	.78479 .13661	.79900 .14671	.81250 .15776
.08		.66524 .09840	.67820 .10257	.69143 .10720	.70492 .11236	.71862 .11811	.73247 .12453	.74636 .13109	.76017 .13655	.77374 .14845	.78689 .15808	.79943 .16849
.09		.66045 .10911	.67291 .11349	.68558 .11832	.69844 .12364	.71142 .12951	.72443 .13591	.73752 .14312	.75044 .15093	.76311 .15946	.77539 .16867	.78714 .17854
.10		.65543 .11942	.66741 .12397	.67255 .12894	.69181 .13438	.70415 .14031	.71651 .14673	.72881 .15305	.74096 .16150	.75227 .16976	.76441 .17861	.77550 .18800

$U/K + I_1/K'$
 -1
 $J+IV=SN \quad (A+TB)$

K=SIN 40

B	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.003	.67761 .00000	.69379 .00000	.71095 .00000	.72928 .00000	.74904 .00000	.77060 .00000	.79454 .00000	.82182 .00000	.85431 .00000	.9663 .0000	1.00000 .00000
.01	.67719 .01451	.69330 .01534	.71037 .01631	.72857 .01749	.74815 .01894	.76944 .02079	.79294 .02327	.81239 .02682	.85003 .03247	.86658 .04319	.92663 .06734
.62	.67596 .02891	.69106 .03053	.70866 .03243	.72650 .03471	.74558 .03749	.75612 .04098	.78845 .04554	.81290 .05176	.83976 .06077	.86654 .07451	.89637 .09508
.35	.67396 .04309	.68954 .04545	.70592 .04819	.72321 .05143	.74154 .05534	.76103 .06015	.78182 .06622	.80393 .07408	.82717 .08450	.85072 .09840	.87291 .11626
.04	.67126 .05697	.68641 .05998	.70227 .06345	.71839 .06751	.73634 .07232	.75467 .07810	.777382 .088515	.79374 .093867	.81408 .10471	.83417 .11807	.85305 .13403
.05	.66790 .07048	.68259 .07405	.69786 .07813	.71375 .08284	.73026 .08633	.74738 .09473	.76505 .10243	.78308 .11153	.80117 .12235	.81684 .13505	.83548 .14959
.06	.664402 .08357	.67819 .08761	.69284 .09213	.70797 .09741	.72356 .10339	.73956 .11028	.75587 .11825	.77233 .12746	.78867 .13507	.80454 .15014	.81955 .16359
.07	.65950 .09621	.67332 .10065	.68734 .10562	.70172 .11121	.71643 .11753	.73141 .12463	.74655 .13261	.76169 .14200	.77662 .15232	.79110 .16380	.80486 .17638
.08	.65495 .10840	.66806 .11315	.68147 .11842	.69514 .12429	.70904 .13084	.72303 .13815	.73720 .14631	.75124 .15538	.76503 .16539	.77840 .17636	.79114 .18822
.09	.64992 .12014	.66251 .12513	.67532 .13064	.68833 .13670	.70148 .14339	.71471 .15077	.72793 .15889	.74103 .16780	.75387 .17751	.76632 .18802	.77822 .19927
.10	.64464 .13143	.65673 .13662	.66898 .14228	.68137 .14848	.69394 .15524	.70634 .16263	.71878 .17068	.73107 .17941	.74310 .18883	.75478 .19893	.76598 .20966

$\Upsilon/\kappa + \Gamma V/\kappa'$
 $\gamma + IV = SN^{-1} (A \circ IV)$

K=SIN 45

B	A= .90	A= .91	A= .92	A= .93	A= .94	A= .95	A= .96	A= .97	A= .98	A= .99	A= 1.00
0.00	.66670 .00000	.68281 .00000	.70035 .00000	.71912 .00000	.73941 .00000	.76160 .00000	.78630 .00000	.81450 .00000	.84819 .00000	.89240 .00000	1.00000
.01	.66586 .01602	.68229 .01697	.69974 .01808	.71638 .01943	.73848 .02108	.76039 .02320	.78460 .02602	.81195 .03007	.84369 .03651	.88166 .04868	.92354 .07608
.02	.66456 .03191	.68077 .03377	.69793 .03594	.71520 .04631	.73576 .04172	.75608 .04572	.77987 .05092	.80512 .05602	.83290 .06829	.86273 .08392	.89161 .10732
.03	.66244 .04755	.67832 .05025	.69504 .05339	.71272 .05710	.73150 .06157	.75151 .06707	.77289 .07401	.79568 .08298	.81966 .09488	.84400 .11072	.86694 .13108
.04	.65957 .06285	.67501 .06629	.69118 .07027	.70815 .07491	.72600 .08042	.74677 .08503	.76445 .09510	.78493 .10507	.80567 .11746	.82657 .13272	.84602 .15094
.05	.65604 .07771	.67097 .08181	.68652 .08646	.70271 .09186	.71956 .09817	.73709 .10555	.75510 .11431	.77368 .12473	.79225 .13711	.81039 .15164	.82748 .16828
.06	.55193 .09610	.66632 .09674	.68121 .10199	.69660 .10797	.71249 .11482	.72882 .12272	.74549 .13185	.76232 .14241	.77903 .15456	.79527 .16839	.81063 .18381
.07	.64734 .10598	.66116 .11107	.67538 .11677	.68999 .12318	.70495 .13043	.72020 .13364	.73562 .14795	.75105 .15849	.76628 .17033	.78104 .18351	.79506 .19795
.08	.64234 .11934	.65560 .12479	.65917 .13084	.68302 .13757	.69712 .14506	.71133 .15347	.72572 .16263	.73998 .17324	.75400 .18475	.76757 .19735	.78050 .21098
.09	.63701 .13213	.64972 .13791	.66255 .14422	.67581 .15118	.68912 .15895	.70251 .16732	.71589 .17665	.72916 .18669	.74216 .19806	.75475 .21014	.76678 .22309
.10	.63143 .14450	.64360 .15045	.65595 .15696	.66844 .16406	.68102 .17183	.69363 .18032	.70618 .18956	.71859 .19060	.73073 .21044	.74249 .22206	.75375 .23443

$U/K + IV/K'$
 -1
 $J + IV = SN \quad (A + [B])$

K=SIN 56

B	A= .90	A= .91	A= .92	A= .93	A= .94	A= .95	A= .96	A= .97	A= .98	A= .99	A= 1.00
0.00	.65247	.66933	.68723	.70557	.72746	.75039	.77598	.80531	.84046	.88677	1.00000
	.00006	.00000	.00300	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.01	.65200	.66873	.68664	.70578	.72647	.74906	.77418	.80259	.83569	.87541	.91932
	.01770	.01879	.02008	.02154	.02355	.02500	.02926	.03392	.04133	.05531	.06672
.02	.65061	.66716	.68471	.70345	.72557	.74535	.76914	.79533	.82423	.85533	.88548
	.03525	.03740	.03991	.04292	.04660	.05121	.05722	.06541	.07724	.09523	.12214
37	.64035	.66453	.68162	.69974	.71902	.73963	.76169	.78527	.81014	.83542	.85925
	.05251	.05563	.05926	.06356	.06873	.07503	.08310	.09346	.10719	.12547	.14895
.04	.64529	.66101	.67751	.69486	.71315	.73241	.75269	.77301	.79544	.81684	.83693
	.06937	.07336	.07795	.08333	.08955	.09734	.10660	.11820	.13252	.15017	.17124
.05	.64152	.65670	.67253	.69305	.70629	.72423	.74279	.76179	.78089	.80955	.81711
	.38574	.09047	.09566	.10212	.10930	.11794	.12603	.14014	.15447	.17130	.19059
.06	.63714	.65173	.66686	.68252	.69672	.71539	.73243	.74964	.76675	.78537	.79905
	.10155	.10691	.11218	.11990	.12783	.13537	.14755	.15979	.17388	.18991	.20782
.07	.63224	.64623	.66064	.67546	.69066	.70617	.72187	.73758	.75309	.76811	.78234
	.11677	.12265	.12924	.13666	.14505	.15456	.16535	.17757	.19131	.20662	.22341
.08	.62591	.64029	.65400	.66902	.68229	.69674	.71127	.72573	.73992	.75366	.76670
	.13138	.13763	.14467	.15246	.16146	.17089	.18173	.19380	.20717	.22161	.23768
.09	.62124	.63402	.64706	.66031	.67573	.68724	.70075	.71412	.72722	.73988	.75195
	.14532	.15201	.15930	.16735	.17624	.18600	.19687	.20875	.22172	.23578	.25086
.10	.61528	.62749	.63989	.65243	.66507	.67776	.69035	.70279	.71495	.72671	.73793
	.15879	.16566	.17316	.18140	.19039	.20022	.21095	.22260	.23519	.24871	.26311

$U/K + IV/K$
 -1
 $U+IV=SN$ (A+IB)

K=SIN 55

		A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.00	.63550	.65272	.67113	.69097	.71254	.73630	.76295	.79363	.83059	.87953	.1.00000	.00000
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.01	.63550	.65213	.67043	.69011	.71146	.73490	.76101	.79070	.82545	.86334	.91382	.10009
	.01956	.02086	.02237	.02419	.02643	.02923	.03312	.03858	.04723	.06324	.07234	.10009
.02	.63350	.65039	.66836	.68759	.70833	.73085	.75557	.78287	.81311	.84575	.87745	.14065
	.03699	.04150	.04444	.04796	.05226	.05767	.06472	.07432	.08816	.10919	.14065	
38	.63107	.64756	.66502	.68359	.70342	.72463	.74752	.77200	.79789	.82426	.84913	
	.05896	.06170	.06594	.07197	.07703	.08448	.09388	.10603	.12213	.14356	.17111	
.04	.62778	.64376	.66058	.67433	.69708	.71693	.73779	.75961	.78199	.80415	.82495	
	.07665	.08130	.08667	.09296	.10042	.11137	.12034	.13387	.15069	.17142	.19622	
.05	.62373	.63912	.65522	.67206	.68967	.70803	.72707	.74659	.76623	.78540	.80342	
	.09466	.10014	.10650	.11381	.12232	.13235	.14424	.15841	.17526	.19507	.21781	
.06	.61902	.63378	.64911	.66501	.68149	.69847	.71595	.73343	.75089	.76783	.78377	
	.11202	.11827	.12536	.13344	.14273	.15345	.16587	.18025	.19683	.21572	.23686	
.07	.61376	.62786	.64241	.65740	.67279	.68859	.70442	.72036	.73607	.75125	.76557	
	.12868	.13552	.14322	.15189	.16171	.1728	.18552	.19986	.21605	.23409	.25392	
.08	.60804	.62149	.63527	.64338	.66375	.67832	.69296	.70751	.72177	.73552	.74853	
	.14461	.15194	.16010	.16919	.17937	.19075	.20348	.21766	.23338	.25064	.26936	
.09	.60196	.61475	.62780	.64108	.65653	.66805	.68158	.69494	.70799	.72056	.73246	
	.15983	.16754	.17603	.18542	.19581	.20725	.21997	.23391	.24916	.26571	.28350	
.10	.59559	.60775	.62011	.63261	.64520	.65781	.67034	.68268	.69470	.70626	.71721	
	.17435	.18233	.19108	.20165	.21115	.22226	.23519	.24884	.26363	.27953	.29649	

$U/K + IV/K^*$
 $J \cdot iY = SN^{-1} (A + r \cdot B)$

X=SIN 60

B	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.00	.61458	.63213	.65099	.67159	.69359	.71840	.74626	.77855	.81772	.87001	1.00000
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.01	.61403	.63149	.65022	.67045	.69251	.71685	.74413	.77534	.81209	.85670	.90644
	.02169	.02320	.02498	.02714	.02981	.03323	.03779	.04431	.05465	.07407	.11752
.02	.61241	.62960	.64796	.66771	.68909	.71243	.73815	.76673	.79855	.83305	.86660
	.04316	.04612	.04961	.05379	.05891	.06536	.07377	.08524	.10179	.12693	.16453
.03	.60978	.62652	.64433	.66334	.68371	.70565	.72932	.75479	.78182	.80941	.83540
	.06423	.06852	.07355	.07951	.08672	.09560	.10682	.12136	.14063	.16631	.19938
.04	.60622	.62240	.63950	.65759	.67678	.69713	.71863	.74117	.76431	.79723	.82087
	.08472	.09021	.09656	.10402	.11268	.12357	.13664	.15282	.17297	.19785	.22768
.05	.60184	.61737	.63367	.65176	.66868	.68742	.70688	.72685	.74694	.76653	.78482
	.10452	.11102	.11849	.12713	.13725	.14918	.16336	.18030	.20049	.22427	.25165
.06	.59675	.61159	.62703	.64309	.65976	.67696	.69458	.71239	.73005	.74711	.76305
	.12353	.13083	.13924	.14380	.15981	.17255	.18733	.20451	.22435	.24701	.27244
.07	.59103	.60519	.61977	.63482	.65028	.66608	.68207	.69805	.71375	.72883	.74292
	.14170	.14974	.15879	.16903	.18065	.19387	.20892	.22602	.24534	.26694	.29076
.08	.58493	.59831	.61205	.62512	.640+6	.65498	.66955	.68398	.69806	.71153	.72412
	.15901	.16759	.17717	.18788	.19988	.21335	.22844	.24530	.26403	.28464	.30707
.09	.57840	.59106	.60400	.61715	.63046	.64383	.65715	.67627	.68299	.69512	.70646
	.17546	.18446	.19441	.20544	.21766	.23121	.24619	.26271	.28062	.30051	.32172
.10	.57157	.58355	.59572	.60801	.62038	.63273	.64496	.65693	.66850	.67951	.68979
	.19106	.20037	.21058	.22180	.23411	.24762	.26240	.27852	.29600	.31484	.33497

$U/K + IV/K'$
 $U+IV=SN^{-1} (A+B)$

K=SIN 65

B	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.00	.58856	.60636	.62555	.64651	.66954	.69522	.72444	.75860	.80048	.85707	1.00000
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.01	.58796	.60566	.62474	.64547	.66823	.69350	.72205	.75500	.79417	.84218	.89610
	.02400	.02581	.02795	.03055	.03379	.03794	.04352	.05152	.06422	.08806	.14132
.02	.58620	.60359	.62226	.64244	.66443	.68058	.71537	.74535	.77695	.81560	.85128
	.04775	.05128	.05546	.06049	.06669	.07453	.08480	.09887	.11921	.15017	.19558
.03	.58334	.60024	.61828	.63763	.65848	.68104	.70550	.73196	.76014	.78894	.81598
	.07099	.07611	.08212	.08929	.09800	.10878	.12246	.14026	.16394	.19560	.23655
.04	.57946	.59575	.61299	.63131	.65082	.67157	.69359	.71671	.74046	.76392	.78565
	.09354	.10005	.10764	.11659	.12727	.14021	.15610	.17587	.20059	.23123	.26814
.05	.57474	.59028	.60662	.62362	.64189	.66082	.68052	.70073	.72099	.74061	.75366
	.11522	.12293	.13182	.14216	.15431	.16871	.18590	.20652	.23119	.26038	.29413
.06	.56925	.58401	.59940	.61543	.63239	.64930	.66690	.68465	.70214	.71865	.73417
	.13595	.14464	.15456	.16596	.17913	.	.21228	.23308	.25721	.28487	.31602
.07	.56315	.57709	.59153	.60642	.62173	.63735	.65312	.66079	.6805	.69850	.71169
	.15565	.16512	.17583	.18798	.20182	.21763	.23570	.25630	.27964	.30582	.33475
.08	.55655	.56969	.58318	.59700	.61105	.62524	.63941	.65334	.66678	.67940	.69089
	.17431	.18438	.19566	.20431	.22255	.23856	.25657	.27674	.291920	.32398	.35098
.09	.54957	.56193	.57452	.58732	.60023	.61314	.62592	.63838	.65030	.66144	.67155
	.19192	.20244	.21411	.22767	.24149	.25750	.27527	.29489	.31643	.33990	.36518
.10	.54231	.55391	.56566	.57752	.58939	.60118	.61275	.62395	.63461	.64452	.65349
	.20853	.21935	.23127	.24438	.25862	.27469	.29209	.31110	.33173	.35397	.37773

$U/K + IV/K'$
 $J + IV = \zeta_N^{-1} (A + ^*B)$

$K = \sin 70$

	B	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.00	.55585	.57370	.59309	.61437	.63797	.66456	.69513	.73137	.77650	.83866	.100000	.00000
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.01	.55521	.57293	.59217	.61322	.63550	.66261	.69241	.72722	.76919	.82139	.88064	.17580
	.02648	.02665	.03124	.03441	.03840	.04356	.05056	.06068	.07687	.10743		
.02	.55330	.57067	.58944	.60386	.63225	.65706	.68480	.71614	.75157	.79046	.82819	
	.05264	.05687	.06191	.06504	.07555	.08537	.09821	.11596	.14184	.18151	.24141	
.03	.55021	.56703	.58507	.60453	.62562	.64857	.67361	.70081	.72987	.75348	.78678	
	.07817	.08426	.09152	.10022	.11087	.12414	.14120	.16353	.19348	.23386	.28649	
.04	.54605	.56216	.57930	.59759	.61713	.63799	.66018	.68348	.70734	.73060	.75153	
	.10283	.11052	.11969	.13049	.14349	.15935	.17899	.20360	.23460	.27330	.32021	
.05	.54097	.55626	.57238	.58138	.60729	.62605	.64557	.66549	.68528	.70404	.72063	
	.12643	.13557	.14618	.15360	.17326	.19080	.21186	.23727	.26787	.30425	.34648	
.06	.53511	.54952	.56457	.58027	.59657	.61337	.63049	.64759	.66420	.67963	.69311	
	.14884	.15909	.17086	.18446	.20027	.21674	.24038	.26574	.29526	.32922	.36750	
.07	.52862	.54213	.55612	.57054	.58533	.60035	.61539	.63017	.64426	.65717	.66834	
	.17000	.18111	.19373	.20612	.22460	.24350	.26518	.28999	.31816	.34979	.38470	
.08	.52165	.53427	.54722	.56045	.57364	.58728	.60055	.61340	.62550	.63646	.64587	
	.18988	.20163	.21483	.22971	.24551	.26247	.28685	.31084	.33757	.36703	.39903	
.09	.51431	.52608	.53805	.55016	.56231	.57435	.58612	.59738	.60788	.61730	.62534	
	.20851	.22070	.23427	.24939	.26625	.28503	.30568	.32893	.35423	.38170	.41117	
.10	.50673	.51768	.52874	.53984	.55087	.56170	.57219	.58243	.59132	.59951	.60649	
	.22592	.23839	.25215	.26733	.29407	.30241	.32271	.34477	.36868	.39435	.42162	

$U/K + IV/K'$
 $\frac{-1}{1}$
 $U+IV=SN$ (A+IB)

X=SIN 75

	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.00	.51411 .00000	.53161 .00000	.55077 .00000	.57196 .00000	.59172 .00000	.62281 .00000	.65444 .00000	.69263 .00000	.74133 .00000	.81060 .00000	1.00000
.01	.51343 .02898	.53079 .03156	.54976 .03469	.57070 .03557	.59408 .04351	.62061 .05001	.65129 .05857	.68777 .07220	.73253 .09319	.78951 .13531	.85498 .22959
.02	.51141 .05754	.52837 .06258	.54681 .06065	.56702 .07611	.58936 .08551	.61431 .09767	.64255 .11400	.67475 .13697	.71151 .17107	.75192 .22427	.79010 .30592
.03	.50815 .06533	.52449 .09258	.54211 .10125	.56121 .11178	.58204 .12482	.60483 .14132	.62982 .16272	.65704 .19120	.68603 .22993	.71500 .29281	.74014 .35236
.04	.50378 .11202	.51932 .12118	.53593 .13201	.55370 .14499	.57274 .16076	.59312 .18071	.61476 .20454	.63738 .23535	.66048 .27452	.68161 .32374	.69931 .36344
.05	.49846 .13740	.51310 .14812	.52857 .16065	.54490 .17544	.56210 .19307	.58001 .21427	.59867 .23994	.61740 .27113	.63554 .30845	.65190 .35375	.66498 .40595
.06	.49237 .16133	.50605 .17327	.52035 .18706	.5323 .20309	.55054 .22104	.56644 .24383	.58235 .26983	.59796 .30332	.61261 .33587	.62546 .37661	.63592 .42206
.07	.48567 .18373	.4936 .19658	.51152 .21124	.52502 .22603	.53879 .24734	.55264 .26957	.56631 .29514	.57942 .32441	.59146 .35759	.60981 .39459	.62496 .43496
.08	.47852 .20461	.49029 .21809	.50232 .23328	.51454 .25047	.52632 .26932	.53901 .29192	.55031 .31674	.56194 .34455	.57199 .37541	.58052 .40915	.58707 .44533
.09	.47106 .22400	.49192 .23787	.49293 .25335	.50398 .27064	.51496 .28994	.52570 .31145	.53598 .33531	.54553 .36160	.55406 .359030	.56122 .42120	.56620 .45333
.10	.46339 .24197	.47342 .25f05	.48348 .27161	.49349 .28979	.50333 .30775	.51285 .32860	.52196 .35142	.53015 .37624	.53746 .40296	.54360 .43140	.54929 .46123

$U/K + IV/K'$
 -1
 $U+IV=SN$ (A+IB)

K=SIN 30

	8	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.00	.45945	.47590	.49404	.51430	.53726	.56361	.59537	.63442	.68597	.76333	1.00000	.00000
.01	.45876	.47506	.49380	.51297	.53551	.56133	.59181	.62866	.67511	.73581	.80469	.31899
.02	.45673	.47260	.48996	.50911	.53047	.5545*	.58201	.61364	.64987	.6889*	.7215*	.39265
.03	.45346	.46866	.48513	.50308	.52273	.54432	.56803	.59377	.62066	.64602	.66441	.42708
.04	.44909	.46346	.47684	.49534	.51304	.53194	.55191	.57245	.59244	.60977	.62147	.44685
.05	.44382	.45724	.47142	.48639	.50211	.51845	.53512	.55153	.56669	.57917	.58731	.45984
.06	.43781	.45024	.46321	.47668	.49054	.50460	.51851	.53176	.54356	.55298	.55902	.46921
.07	.43126	.44271	.45450	.46656	.47875	.49085	.50254	.51339	.52282	.53020	.53492	.47643
.08	.42432	.43483	.44552	.45630	.46702	.47743	.48240	.49642	.50414	.51010	.51394	.48228
.09	.41713	.42675	.43643	.44608	.45554	.4646*	.47314	.48076	.48721	.49216	.49538	.48720
.10	.40980	.41861	.42738	.43603	.44442	.45239	.45975	.47177	.47598	.47875	.49146	.46032

$U/K + IV/K'$
 $U+IV=SN^{-1}$ (A+IB)

K=STN 85

B	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.00	.38262 .00000	.39661 .00000	.41256 .00000	.43026 .00000	.45052 .00000	.47424 .00000	.50291 .00000	.53926 .00000	.58921 .00000	.67017 .00000	1.00000 .00000
.01	.38200 .03281	.39604 .03617	.41159 .04034	.42301 .04565	.44884 .05264	.47185 .06225	.49928 .07625	.53311 .09843	.57673 .13828	.63452 .22512	.68942 .44255
.02	.38016 .06504	.39379 .07155	.40878 .07956	.42539 .10278	.44403 .12039	.46519 .14508	.48947 .18163	.51753 .23905	.54936 .33271	.58160 .47302	.60132 .7302
.03	.37720 .09616	.39021 .10544	.40434 .11675	.41978 .13079	.43673 .14860	.45539 .17177	.47583 .20273	.49776 .24518	.51992 .30424	.53890 .38470	.54680 .68456
.04	.37328 .12577	.38549 .13734	.39859 .15125	.41265 .16821	.42772 .18920	.44370 .21557	.46054 .24916	.47742 .29223	.49311 .34704	.50534 .41437	.51138 .45120
.05	.36856 .15357	.37990 .16694	.39168 .18276	.40451 .20117	.41771 .22449	.43133 .25225	.44502 .28613	.45812 .32734	.46962 .37664	.47814 .43361	.48230 .49581
.06	.36322 .17943	.37366 .19410	.38453 .21120	.39577 .23126	.40726 .25489	.41879 .28280	.43000 .31571	.44036 .35415	.44911 .39824	.45541 .44725	.45852 .49942
.07	.35744 .20331	.36698 .21885	.37678 .23671	.38675 .25728	.39674 .28100	.40654 .30834	.41582 .33967	.42416 .37519	.43105 .41472	.43595 .45756	.43842 .50245
.08	.35134 .22524	.36005 .24131	.36887 .25951	.37711 .28024	.38641 .30349	.39478 .32986	.40256 .35940	.41000 .39022	.41500 .42778	.41895 .46575	.42100 .50512
.09	.34507 .24534	.35299 .25165	.36092 .27988	.36877 .30726	.37639 .32297	.38361 .34615	.39022 .37590	.40060 .43845	.40388 .47251	.40564 .50755	
.10	.33870 .26373	.34592 .28006	.35307 .29812	.36005 .31004	.36676 .33994	.37300 .36390	.37873 .38991	.38036 .41762	.38756 .44740	.39036 .47824	.39191 .50981

$U/K+IV/K'$
 -1
 $I+IV=SN \quad (A+rR)$

K=SIN 86

B	A = .96	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.0j
.00	.36229 .00003	.37579 .00000	.39078 .00000	.40765 .00000	.42698 .00000	.44967 .00000	.47712 .00000	.51209 .00000	.56047 .00000	.64006 .00000	1.00000 .00000
.01	.36169 .03302	.37505 .03642	.38985 .04066	.40645 .04606	.42536 .05319	.44734 .06302	.47359 .07741	.50605 .0835	.54803 .14195	.60362 .23383	.65319 .46321
.02	.35993 .06545	.37290 .07204	.38715 .08317	.40297 .09045	.42072 .10380	.44089 .12178	.46406 .14708	.4908~ .18466	.52111 .24393	.55136 .34065	.56858 .43381
.03	.35711 .09674	.36946 .10614	.38289 .11760	.39757 .13186	.41370 .14997	.43144 .17354	.45086 .20517	.47166 .24856	.49264 .30894	.51870 .39094	.549184 .49184
.04	.35336 .12650	.36495 .13821	.37739 .15230	.39074 .16350	.40504 .19030	.42025 .21759	.43614 .25174	.45207 .29554	.46676 .35121	.47801 .41938	.48324 .49666
.05	.34805 .15442	.35960 .16794	.37097 .18394	.38294 .20309	.39545 .22621	.40834 .25434	.42125 .28868	.43357 .33043	.44430 .38030	.45211 .43774	.45572 .50018
.06	.34375 .18037	.35364 .19519	.36394 .21247	.37458 .23275	.38545 .25665	.39634 .28484	.40690 .31815	.41560 .35699	.42474 .40145	.43052 .45075	.43323 .50307
.07	.33823 .20431	.34727 .22000	.35655 .23803	.36597 .25879	.37541 .28275	.38464 .31035	.39337 .34197	.40118 .37777	.40757 .41756	.41206 .46060	.41422 .50558
.08	.33242 .22629	.34066 .24249	.34900 .25085	.35734 .28165	.36555 .30520	.3734~ .33179	.38074 .36154	.38716 .39449	.39234 .43032	.39956 .46843	.39776 .50786
.09	.32645 .24641	.33394 .25284	.34143 .28122	.34884 .30174	.35602 .32462	.36281 .34993	.36900 .37789	.37437 .40825	.37867 .44075	.38166 .47790	.38324 .50999
.10	.32035 .26480	.32724 .28125	.33396 .29943	.34054 .31948	.34686 .34153	.35275 .36561	.35809 .39177	.36266 .41981	.36631 .44950	.36886 .48041	.37026 .51231

U/K^+
 IV/K^+
 -1
 $J+IV=SN$ (A+IB)

K=SIN 87

		A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.90		.35881 .00090	.35146 .00050	.36556 .00000	.38142 .00000	.39960 .00000	.42096 .00000	.44630 .00000	.48002 .00000	.52610 .00000	.60294 .00000	1.00000
.01		.33525 .03319	.35079 .03663	.36466 .04091	.38028 .04639	.39806 .05363	.41875 .06364	.44352 .07635	.47420 .10151	.51398 .14500	.56656 .24122	.61065 .47984
.02		.33659 .06577	.34875 .07243	.36213 .08066	.37598 .09107	.39366 .10462	.41262 .12290	.43442 .14863	.45961 .16712	.48802 .24769	.51605 .34706	.53102 .49227
.03		.33392 .09120	.34551 .09669	.35811 .11028	.37188 .13271	.38701 .15107	.40365 .17502	.42187 .20712	.44134 .25127	.46078 .31259	.47690 .39590	.48433 .49500
.04		.33039 .12237	.34126 .13890	.35291 .15313	.36542 .17051	.37882 .19207	.39307 .21920	.40792 .25380	.42278 .29218	.43638 .35452	.44665 .42331	.45118 .50091
.05		.32614 .15509	.33522 .16872	.34686 .16421	.35806 .20421	.36977 .22757	.38181 .25600	.39385 .29070	.40531 .33287	.42233 .38318	.44698 .42331	.45359
.06		.32235 .16111	.33060 .19605	.34023 .21347	.35018 .23392	.36034 .25803	.37050 .28652	.38035 .32007	.38933 .35921	.39684 .40396	.40446 .45349	.40446 .50590
.07		.31615 .20510	.32461 .22091	.33328 .23906	.34208 .25999	.35049 .28413	.35950 .31191	.36761 .34377	.37494 .37980	.38013 .41919	.38481 .46297	.38671 .40601
.08		.31070 .22711	.31839 .24342	.32618 .26189	.33197 .28284	.34162 .30655	.34897 .33329	.35572 .36312	.36168 .39633	.36974 .43231	.37135 .47052	.37135 .50399
.09		.30506 .24724	.31208 .25378	.31907 .28226	.32598 .30291	.33267 .32591	.33898 .35142	.34673 .37946	.34970 .40993	.35355 .44254	.35640 .47676	.35778 .51168
.10		.29940 .26565	.30576 .28218	.31205 .30046	.31119 .32061	.32408 .34217	.32956 .36693	.33450 .39323	.33873 .42137	.34208 .45113	.34443 .48209	.34565 .51371

$U/K + IV/K^*$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 08

B	A=.90	A=.91	A=.92	A=.93	A=.94	A=.95	A=.96	A=.97	A=.98	A=.99	A=1.00
0.30	.31021	.32184	.33476	.34934	.36606	.38572	.40964	.44025	.48301	.55509	1.00000
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
0.4	.30969	.32120	.33395	.34828	.36163	.38369	.40649	.43480	.47156	.52008	.55869
	.03330	.03677	.04109	.04662	.05395	.06410	.07904	.10307	.14729	.24686	.4190
0.02	.30816	.31932	.33160	.34524	.36056	.37799	.39863	.42119	.44726	.47272	.48565
	.06600	.07271	.08101	.09152	.10522	.12372	.14937	.18892	.25092	.35177	.49833
47	.30570	.31633	.32769	.34053	.35441	.36969	.38640	.4024	.42197	.43650	.44291
	.09753	.10709	.11878	.13333	.15186	.17607	.20655	.25324	.31543	.39948	.50154
0.04	.30245	.31241	.32310	.33457	.34686	.35991	.37351	.38706	.39944	.40867	.41256
	.12740	.13539	.15373	.17225	.19299	.22036	.25529	.30006	.35691	.42614	.50394
0.05	.29854	.30777	.31752	.32779	.33851	.34953	.36054	.37098	.37996	.38634	.38906
	.15557	.16929	.18555	.20502	.22655	.25719	.29216	.33463	.38525	.43330	.50601
0.06	.29413	.30261	.31143	.32054	.32983	.33912	.34809	.35628	.36303	.36779	.36985
	.18164	.19667	.21420	.23477	.25903	.28770	.32146	.36082	.40577	.45545	.50733
0.07	.26936	.29710	.30503	.31309	.32114	.32899	.33639	.34297	.34831	.35196	.35361
	.20567	.22155	.23981	.26085	.28512	.31307	.34507	.39125	.4218	.46467	.50975
0.08	.26434	.29138	.2984	.30563	.31262	.31932	.32550	.33089	.33520	.33816	.33955
	.22770	.24409	.26265	.28369	.30751	.33437	.36443	.39766	.43372	.47201	.51151
0.09	.27916	.28553	.29198	.29829	.30439	.31046	.31539	.31980	.32348	.32594	.32715
	.24785	.26445	.28301	.30374	.32684	.35244	.38058	.41114	.44383	.47810	.51323
0.10	.27396	.27978	.28553	.29114	.29651	.30151	.30601	.30985	.31286	.31498	.31607
	.26625	.28285	.30119	.32143	.34366	.36795	.39427	.42248	.45230	.48329	.51493

$U/K+IV/K^*$
 ≈ 1
 $U+IV=SN \quad (A+IB)$

K=SIN 89

B	A = .90	A = .91	A = .92	A = .93	A = .94	A = .95	A = .96	A = .97	A = .98	A = .99	A = 1.00
0.00	.27084 .00006	.28101 .00000	.29231 .00000	.30506 .00000	.31970 .00000	.33693 .00000	.35789 .00000	.38477 .00000	.42243 .00000	.48632 .00009	1.00000 .00000
.01	.27038 .03338	.28044 .03686	.29160 .04120	.30414 .04677	.31845 .05414	.33513 .06437	.35512 .07946	.37995 .10379	.41223 .14671	.45476 .25039	.48747 .49917
.02	.26904 .06614	.27880 .07268	.28953 .06122	.30147 .09179	.31487 .10558	.33013 .12422	.34767 .15059	.36793 .19003	.39072 .25261	.41254 .35465	.42371 .50197
.03	.26689 .09773	.27618 .10733	.28628 .11907	.29733 .13370	.30947 .15234	.32283 .17675	.33744 .20941	.35301 .25444	.36846 .31710	.38103 .40166	.38641 .50397
.04	.26404 .12774	.27275 .13969	.28200 .15409	.29211 .17170	.30284 .19354	.31425 .22107	.32612 .25619	.33794 .30124	.34869 .35836	.35995 .42185	.36666 .50576
.05	.26062 .15586	.26868 .16963	.27720 .18596	.28616 .20551	.29552 .22915	.30514 .25792	.31474 .29305	.32383 .33570	.33163 .36650	.33713 .44470	.33943 .50747
.06	.25676 .18196	.26416 .19704	.27186 .21463	.27981 .23528	.28792 .25964	.29607 .28841	.30384 .32229	.31056 .36178	.31686 .40686	.32093 .45663	.32267 .50914
.07	.25258 .21601	.25933 .22195	.26626 .24026	.27329 .26137	.28031 .28572	.28716 .31176	.29530 .34685	.29932 .38213	.31056 .42234	.32093 .46569	.30850 .51079
.08	.24819 .22805	.25433 .24449	.26055 .26310	.26676 .28420	.27286 .30009	.27869 .33503	.28407 .36516	.28876 .39845	.29250 .43459	.29504 .47291	.29623 .51242
.09	.24368 .24621	.24926 .26485	.25484 .28346	.26034 .30425	.26566 .32740	.27008 .35306	.27524 .38126	.27915 .41187	.28226 .44460	.28438 .47690	.28541 .51404
.10	.23911 .26662	.24419 .28325	.24920 .30164	.25409 .32191	.25877 .34419	.26312 .36853	.26703 .39490	.27037 .42315	.27300 .45300	.27462 .48402	.27574 .51566

U/K+IV/K'
-1
U+IV=SN (A+B)

K=SIN 5

		A = 7.00	A = +20	A = +30	A = +40	A = +50	A = +60	A = +70	A = +80	A = +90	A = +100
.01	*00000	*02007	*00014	*00022	*00029	*00036	*00043	*00051	*00058	*00065	*00072
	.97512	.97312	.97012	.97012	.97012	.97012	.97012	.97012	.97012	.97012	.97012
.02	*00000	*00028	*00057	*00065	*00114	*00142	*00170	*00199	*00227	*00256	*00284
	.94063	.94063	.94063	.94063	.94064	.94064	.94064	.94064	.94065	.94065	.94065
.03	*00000	*00062	*00124	*00186	*00248	*00310	*00372	*0434	*00496	*00558	*00620
	.91187	.91187	.91187	.91187	.91188	.91188	.91189	.91190	.91191	.91193	.91194
.04	*00000	*00106	*00212	*00318	*00424	*00529	*00635	*00741	*00847	*00952	*01058
	.88410	.88411	.88411	.88412	.88413	.88414	.88416	.88418	.88421	.88423	.88426
.05	*00000	*00156	*00316	*00474	*00631	*00749	*00947	*01104	*01262	*01419	*01576
	.85753	.85753	.85754	.85755	.85757	.85760	.85763	.85767	.85771	.85776	.85781
.06	*00000	*00216	*00432	*00647	*00863	*01078	*01294	*01509	*01724	*01938	*02153
	.83225	.83225	.83226	.83226	.83229	.83232	.83235	.83241	.83246	.83253	.83269
.07	*00000	*00276	*00556	*00833	*01111	*01383	*01665	*01942	*02218	*02495	*02770
	.80829	.80830	.80832	.80835	.80839	.80845	.80852	.80861	.80870	.80881	.80893
.08	*00000	*00343	*00685	*01028	*01370	*01712	*02053	*02394	*02735	*03075	*03414
	.78566	.78567	.78569	.78573	.78590	.78597	.78608	.78621	.78636	.78652	
.09	*00000	*00409	*00818	*01227	*01636	*02044	*02451	*02858	*03264	*03670	*04074
	.76429	.76431	.76434	.76439	.76447	.76457	.76470	.76484	.76501	.76520	.76541
.10	*00000	*00477	*00953	*01429	*01905	*02380	*02855	*03326	*03801	*04273	*04743
	.74414	.74415	.74419	.74426	.74436	.74449	.74464	.74482	.74503	.74526	.74552

U/K+IV/K'
-1
U+IV=SN (A+B)

K=SIN 10

		A = 0, 00	A = .10	A = .20	A = .30	A = .40	A = .50	A = .60	A = .70	A = .80	A = .90	A = 1.00
.01	.00000	.00004	.00007	.00011	.00015	.00019	.00022	.00025	.00029	.00033	.00036	
	.98175	.98175	.98175	.98175	.98175	.98175	.98175	.98175	.98175	.98175	.98175	
.02	.00000	.00014	.00029	.00043	.00058	.00072	.00087	.00101	.00116	.00130	.00144	
	.96356	.96356	.96356	.96356	.96356	.96356	.96356	.96357	.96357	.96357	.96357	
.03	.00000	.00032	.00065	.00097	.00129	.00161	.00193	.00226	.00258	.00290	.00322	
	.94549	.94549	.94549	.94549	.94550	.94550	.94551	.94551	.94552	.94553	.94554	
50	.01	.00000	.00057	.00113	.00170	.00227	.00283	.00340	.00396	.00453	.00510	.00565
	.92760	.92760	.92761	.92761	.92762	.92763	.92764	.92766	.92767	.92769	.92771	
.05	.00000	.00007	.00175	.00262	.00349	.00436	.00523	.00610	.00697	.00784	.00871	
	.90994	.90995	.90995	.90996	.90996	.90996	.91000	.91002	.91005	.91008	.91011	
.66	.00000	.00124	.00247	.00371	.00494	.00617	.00741	.00864	.00987	.01109	.01232	
	.69256	.69256	.69256	.69259	.69259	.69262	.69265	.69269	.69273	.69279	.69285	
.07	.00000	.00165	.00330	.00495	.00659	.00822	.00988	.01152	.01316	.01480	.01643	
	.87550	.87550	.87552	.87554	.87556	.87563	.87569	.87576	.87584	.87593	.87603	
.08	.00000	.00211	.00422	.00632	.00843	.01053	.01263	.01472	.01681	.01889	.02097	
	.85879	.85879	.85861	.85385	.85890	.85897	.85905	.85915	.85927	.85940	.85954	
.09	.00000	.00251	.00521	.01781	.01041	.01301	.01560	.01819	.02076	.02334	.02590	
	.84245	.84245	.84253	.84263	.84271	.84281	.84295	.84312	.84328	.84346	.84364	
.10	.00000	.00314	.00627	.00941	.01253	.01563	.01877	.02108	.02498	.02807	.03114	
	.82650	.82650	.82661	.82661	.82671	.82683	.82698	.82716	.82736	.82759	.82785	

U/K+IV/K'
 π_1
 U+IV=SN (A+IB)

K=SIN 15

		A=0.00	A=.10	A=.20	A=.30	A=.40	A=.50	A=.60	A=.70	A=.80	A=.90	A=1.00
51	.61	.000000 .98605	.00002 .98605	.00005 .98605	.00007 .98605	.00010 .98605	.00012 .98605	.00014 .98605	.00017 .98605	.00019 .98605	.00022 .98605	.00024 .98605
	.02	.000006 .87211	.000019 .97211	.000029 .97211	.000039 .97212	.000048 .97212	.000053 .97212	.000067 .97212	.000077 .97212	.000087 .97212	.000096 .97212	.000096 .97212
	.03	.000000 .95823	.000022 .95823	.000043 .95823	.000065 .95823	.000086 .95823	.000108 .95823	.000130 .95824	.000151 .95824	.000173 .95825	.000194 .95826	.000216 .95826
51	.04	.000000 .94446	.000038 .94446	.000076 .94446	.000115 .94446	.000152 .94446	.000191 .94446	.000229 .94446	.000267 .94446	.000305 .94446	.000343 .94446	.000381 .94446
	.05	.000000 .93065	.000059 .93067	.000119 .93067	.000178 .93068	.000237 .93069	.000296 .93071	.000355 .93073	.000414 .93075	.000473 .93077	.000535 .93060	.000581 .93063
	.06	.000000 .91703	.000065 .91704	.000169 .91704	.00254 .91706	.00338 .91706	.00423 .91710	.00507 .91714	.00591 .91717	.00676 .91722	.00760 .91726	.00843 .91732
	.07	.000000 .90352	.000114 .90353	.000228 .90354	.000342 .90356	.000456 .90360	.000570 .90364	.000683 .90368	.000797 .90374	.000910 .90381	.001023 .90388	.001136 .90397
	.08	.000000 .89016	.000147 .89016	.00245 .89016	.00442 .89021	.00589 .89021	.00736 .89026	.00882 .89030	.01029 .89039	.01175 .89047	.01320 .89057	.01465 .89060
	.09	.000000 .87694	.00184 .87695	.00366 .87696	.00552 .87702	.00736 .87709	.00919 .87717	.01103 .87727	.01225 .87738	.01457 .87752	.01649 .87767	.01829 .87764
	.10	.000000 .86390	.00224 .86391	.00449 .86395	.00673 .86401	.00896 .86409	.01127 .86413	.01342 .86420	.01564 .86449	.01785 .86457	.02006 .86487	.02226 .86499

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+IG)$

K=SIN 20

1/B	A= 0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
.01	.00000	.00002	.00004	.00005	.00007	.00009	.00011	.00013	.00014	.00016	.00018
	.96833	.96833	.96833	.96833	.96833	.96833	.96833	.96833	.96833	.96833	.96833
.02	.00000	.00007	.00014	.00022	.00029	.00036	.00043	.00050	.00058	.00065	.00072
	.97667	.97667	.97667	.97667	.97667	.97667	.97667	.97667	.97667	.97667	.97667
.03	.00000	.00016	.00032	.00049	.00065	.00081	.00097	.00113	.00129	.00145	.00162
	.96503	.96503	.96503	.96503	.96503	.96503	.96504	.96504	.96505	.96505	.96506
52	.04	.00000	.00029	.00057	.00086	.00115	.00143	.00172	.00200	.00229	.00258
	.95342	.95342	.95343	.95343	.95343	.95343	.95344	.95345	.95346	.95347	.95348
.05	.00000	.00045	.00089	.00134	.00178	.00223	.00267	.00312	.00356	.00401	.00445
	.94181	.94186	.94187	.94187	.94188	.94190	.94191	.94193	.94195	.94196	.94200
.06	.00000	.00064	.00123	.00192	.00255	.00319	.00383	.00446	.00510	.00573	.00637
	.93035	.93035	.93036	.93037	.93039	.93041	.93044	.93047	.93051	.93055	.93060
.07	.00000	.00086	.00173	.00259	.00345	.00432	.00518	.00604	.00689	.00775	.00860
	.91694	.91694	.91692	.91694	.91697	.91700	.91705	.91709	.91715	.91722	.91729
.08	.00000	.00112	.00224	.00336	.00448	.00560	.00671	.00782	.00893	.01004	.01114
	.90754	.90754	.90756	.90759	.90763	.90768	.90774	.90781	.90790	.90799	.90810
.09	.00000	.00141	.00282	.00422	.00563	.00703	.00843	.00982	.01121	.01260	.01398
	.89625	.89625	.89626	.89628	.89632	.89638	.89645	.89663	.89675	.89689	.89703
.10	.00000	.00172	.00345	.00517	.00688	.00860	.01031	.01201	.01371	.01540	.01706
	.88506	.88506	.88509	.88515	.88522	.88532	.88543	.88557	.88563	.88591	.88611

$U/K + IV/K'$
 -1
 $U + IV = SN$ (A+IB)

K=GIN 25

		A= 0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
.01	.00000 .98975	.00001 .90975	.00003 .98975	.00004 .98975	.00006 .98975	.00007 .98975	.00009 .98975	.00010 .98975	.00011 .98975	.00013 .98975	.00014 .98975	
.02	.00000 .97951	.00006 .97951	.00011 .97951	.00017 .97951	.00023 .97951	.00029 .97951	.00034 .97951	.00046 .97952	.00046 .97952	.00052 .97952	.00057 .97952	
.03	.00000 .96928	.00013 .96928	.00026 .96929	.00039 .96929	.00051 .96929	.00054 .96929	.00064 .96929	.00077 .96929	.00090 .96930	.00103 .96930	.00116 .96931	.00129 .96931
.04	.00000 .95908	.00023 .95908	.00046 .95908	.00069 .95908	.00091 .95909	.00114 .95909	.00137 .95910	.00160 .95911	.00183 .95912	.00205 .95913	.00220 .95914	
.05	.00000 .94890	.00036 .94890	.00071 .94890	.00107 .94891	.00142 .94892	.00178 .94693	.00213 .94894	.00249 .94896	.00284 .94898	.00320 .94900	.00355 .94902	
.06	.00000 .93875	.00051 .93875	.00102 .93876	.00153 .93877	.00204 .93878	.00255 .93880	.00306 .93883	.00357 .93886	.00408 .93886	.00456 .93892	.00509 .93896	
.07	.00000 .92864	.00069 .92864	.00136 .92865	.00208 .92867	.00277 .92870	.00346 .92873	.00414 .92876	.00483 .92881	.00552 .92886	.00620 .92892	.00689 .92896	
.08	.00000 .91858	.00090 .91858	.00180 .91860	.00270 .91862	.00355 .91866	.00449 .91866	.00538 .91870	.00628 .91876	.00717 .91882	.00806 .91886	.00894 .91898	
.09	.00000 .90857	.00113 .90857	.00226 .90860	.00339 .90863	.00452 .90868	.00565 .90874	.00677 .90882	.00790 .90891	.00901 .90902	.01013 .90914	.01124 .90927	
.10	.00000 .89861	.00135 .89862	.00278 .89865	.00416 .89870	.00555 .89877	.00693 .89885	.00831 .89896	.00968 .89906	.01105 .89923	.01241 .89939	.01377 .89957	

$U/K + IV/K'$
 -1
 $U+IV = SN \quad (A+18)$

K=SIN 30

	I/8	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
.01	.00000 .99073	.00001 .99073	.00002 .99073	.00004 .99073	.00005 .99073	.00006 .99073	.00007 .99073	.00008 .99073	.00009 .99073	.00011 .99073	.00012 .99073	.00012 .99073
.02	.00000 .98146	.00005 .98146	.00009 .98146	.00014 .98146	.00019 .98146	.00024 .98146	.00028 .98146	.00033 .98146	.00038 .98146	.00043 .98146	.00047 .98146	.00047 .98146
.03	.00000 .97220	.00011 .97220	.00021 .97220	.00032 .97220	.00043 .97220	.00053 .97220	.00064 .97220	.00075 .97221	.00085 .97221	.00096 .97221	.00106 .97222	.00106 .97222
.04	.00000 .96295	.00019 .96295	.00038 .96295	.00057 .96295	.00076 .96295	.00094 .96295	.00113 .96297	.00132 .96298	.00151 .96299	.00170 .96300	.00189 .96301	.00189 .96301
.05	.00000 .95373	.00029 .95373	.00059 .95373	.00086 .95374	.00110 .95374	.00147 .95375	.00177 .95377	.00206 .95378	.00235 .95380	.00265 .95382	.00294 .95384	.00294 .95384
.06	.00000 .94452	.00042 .94452	.00085 .94453	.00127 .94454	.00169 .94455	.00211 .94457	.00254 .94459	.00296 .94462	.00338 .94465	.00380 .94468	.00422 .94472	.00422 .94472
.07	.00000 .93534	.00057 .93535	.00115 .93535	.00172 .93537	.00230 .93539	.00287 .93542	.00344 .93545	.00401 .93547	.00458 .93554	.00516 .93559	.00572 .93565	.00572 .93565
.08	.00000 .92620	.00075 .92620	.00149 .92620	.00224 .92622	.00299 .92624	.00373 .92627	.00447 .92631	.00522 .92636	.00596 .92642	.00669 .92649	.00743 .92665	.00743 .92665
.09	.00000 .91709	.00094 .91709	.00168 .91711	.00242 .91715	.00316 .91719	.00390 .91725	.00470 .91732	.00564 .91740	.00657 .91750	.00750 .91761	.00843 .91773	.00843 .91773
.10	.00000 .90802	.00116 .90803	.00231 .90805	.00367 .90810	.00462 .90816	.00577 .90824	.00692 .90833	.00807 .90845	.00921 .90856	.01034 .90868	.01147 .90869	.01147 .90869

U/K+IV/K'
-1
U+IV=SN (A+IB)

K=SIN 35

		A = 0.00	A = .10	A = .20	A = .30	A = .40	A = .50	A = .60	A = .70	A = .80	A = .90	A = 1.00
.01	.00000	.00001	.00002	.00003	.00004	.00005	.00006	.00007	.00008	.00009	.00010	.00010
	.99143	.99143	.99143	.99143	.99143	.99143	.99143	.99143	.99143	.99143	.99143	.99143
.02	.00000	.00004	.00008	.00012	.00016	.00020	.00024	.00028	.00032	.00036	.00040	.00040
	.98287	.98287	.98287	.98287	.98287	.98287	.98287	.98287	.98287	.98287	.98287	.98287
.03	.00000	.00009	.00018	.00027	.00036	.00045	.00054	.00063	.00072	.00081	.00090	.00090
	.97431	.97431	.97431	.97431	.97431	.97432	.97432	.97432	.97432	.97433	.97433	.97433
.04	.00000	.00016	.00032	.00048	.00064	.00080	.00096	.00112	.00128	.00144	.00160	.00160
	.96576	.96576	.96577	.96577	.96577	.96578	.96578	.96579	.96580	.96581	.96582	.96582
.05	.00000	.00025	.00050	.00075	.00100	.00125	.00150	.00175	.00200	.00225	.00250	.00250
	.95723	.95723	.95723	.95724	.95725	.95726	.95727	.95728	.95730	.95732	.95734	.95734
.06	.00000	.00036	.00072	.00108	.00144	.00180	.00216	.00252	.00287	.00323	.00359	.00359
	.94871	.94871	.94872	.94873	.94874	.94875	.94876	.94878	.94880	.94883	.94886	.94886
.07	.00000	.00049	.00098	.00147	.00195	.00244	.00293	.00341	.00390	.00436	.00486	.00486
	.94022	.94022	.94023	.94024	.94025	.94026	.94029	.94032	.94036	.94040	.94045	.94050
.08	.00000	.00064	.00127	.00191	.00254	.00318	.00381	.00444	.00507	.00570	.00632	.00632
	.93174	.93175	.93176	.93178	.93181	.93185	.93190	.93195	.93202	.93209	.93217	.93217
.09	.00000	.00080	.00160	.00241	.00321	.00401	.00480	.00560	.00639	.00718	.00796	.00796
	.92330	.92331	.92332	.92335	.92340	.92345	.92352	.92359	.92366	.92379	.92390	.92390
.10	.00000	.00099	.00197	.00296	.00394	.00492	.00590	.00688	.00785	.00882	.00978	.00978
	.91488	.91489	.91492	.91496	.91502	.91509	.91516	.91529	.91541	.91555	.91570	.91570

$$\begin{aligned} U/K+IV/K' \\ -\frac{1}{i} \\ U+IV=SN \quad (A+iB) \end{aligned}$$

K=SIN 4.0

		A= 0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
.01	.00000 .99196	.00001 .99196	.00002 .99196	.00003 .99196	.00004 .99196	.00005 .99196	.00006 .99196	.00007 .99196	.00008 .99196	.00009 .99196	.000098 .99196	.000098 .99196
.02	.00000 .98393	.00003 .98393	.00007 .98393	.00010 .98393	.00014 .98393	.00017 .98393	.00021 .98393	.00024 .98393	.00028 .98393	.00031 .98393	.00035 .98393	.00035 .98394
.03	.00000 .97590	.00008 .97590	.00016 .97590	.00023 .97590	.00031 .97590	.00039 .97590	.00047 .97590	.00055 .97590	.00063 .97590	.00070 .97590	.00076 .97592	.00076 .97592
.04	.00000 .96768	.00014 .96768	.00026 .96768	.00042 .96768	.00062 .96768	.00096 .96768	.00135 .96768	.00176 .96768	.00218 .96768	.00259 .96768	.00300 .96768	.00341 .96768
.05	.00000 .95967	.00022 .95967	.00043 .95967	.00065 .95967	.00087 .95967	.00108 .95967	.00130 .95967	.00152 .95967	.00173 .95967	.00195 .95967	.00216 .95967	.00236 .95967
.06	.00000 .95168	.00031 .95168	.00062 .95168	.00093 .95168	.00125 .95168	.00156 .95168	.00187 .95168	.00218 .95168	.00249 .95168	.00280 .95168	.00310 .95168	.00340 .95168
.07	.00000 .94369	.00042 .94369	.00085 .94369	.00127 .94369	.00169 .94369	.00211 .94369	.00253 .94369	.00295 .94369	.00337 .94369	.00379 .94369	.00421 .94369	.00463 .94369
.08	.00000 .93593	.00055 .93593	.00110 .93593	.00165 .93593	.00220 .93593	.00275 .93593	.00330 .93593	.00385 .93593	.00439 .93593	.00494 .93593	.00548 .93593	.00598 .93593
.09	.00000 .92799	.00070 .92800	.00139 .92800	.00209 .92800	.00278 .92800	.00347 .92800	.00416 .92800	.00485 .92800	.00554 .92800	.00622 .92800	.00690 .92800	.00756 .92800
.10	.00000 .92006	.00066 .92006	.00171 .92011	.00257 .92015	.00342 .92020	.00427 .92027	.00512 .92036	.00596 .92046	.00681 .92057	.00765 .92070	.00846 .92085	.00925 .92085

$U/K + IV/K$
 -1
 $II+IV = SN \quad (A+IB)$

K=SIN 45

$1/B$	$A=0.00$	$A= .10$	$A= .20$	$A= .30$	$A= .40$	$A= .50$	$A= .60$	$A= .70$	$A= .80$	$A= .90$	$A=1.00$
.01	.00000	.00001	.00002	.00003	.00004	.00005	.00006	.00007	.00008	.00009	.00008
	.99237	.99237	.99237	.99237	.99237	.99237	.99237	.99237	.99237	.99237	.99237
.02	.00000	.00003	.00006	.00009	.00012	.00015	.00018	.00021	.00024	.00027	.00030
	.98475	.98475	.98475	.98475	.98475	.98475	.98475	.98475	.98475	.98475	.98475
.03	.00000	.00007	.00014	.00021	.00027	.00034	.00041	.00048	.00055	.00062	.00068
	.97713	.97713	.97713	.97713	.97713	.97713	.97713	.97713	.97714	.97714	.97715
57	.00000	.00012	.00024	.00037	.00049	.00061	.00073	.00085	.00097	.00109	.00122
	.96951	.96951	.96952	.96952	.96952	.96953	.96953	.96954	.96955	.96955	.96956
.05	.00000	.00019	.00038	.00057	.00076	.00095	.00114	.00133	.00152	.00171	.00190
	.96191	.96191	.96191	.96192	.96192	.96193	.96193	.96196	.96197	.96199	.96200
.06	.00000	.00027	.00055	.00082	.00109	.00136	.00164	.00191	.00218	.00245	.00272
	.95432	.95432	.95432	.95433	.95434	.95436	.95438	.95440	.95442	.95445	.95446
.07	.00000	.00037	.00074	.00111	.00148	.0018	.00222	.00259	.00296	.00333	.00369
	.94674	.94674	.94675	.94676	.94676	.94680	.94683	.94686	.94691	.94695	.94699
.08	.00000	.00048	.00097	.00145	.00193	.00241	.00289	.00337	.00385	.00433	.00481
	.93917	.93917	.93918	.93921	.93923	.93927	.93931	.93936	.93942	.93948	.93955
.09	.00000	.00061	.00122	.00183	.00244	.00305	.00365	.00426	.00486	.00546	.00606
	.93163	.93163	.93165	.93168	.93171	.93176	.93182	.93189	.93197	.93206	.93217
.10	.00000	.00075	.00150	.00225	.00300	.00375	.00449	.00524	.00598	.00671	.00744
	.92410	.92410	.92413	.92417	.92422	.92429	.92437	.92446	.92457	.92470	.92484

$U/K + IV/K'$
 $U+IV=SN$ (A+IB)

		K=SIN 50				A= .90				A= 1.00	
		A= .10		A= .20		A= .40		A= .60		A= .80	
		A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
1/8	A= 0.00	.00000	.00001	.00002	.00003	.00004	.00005	.00006	.00006	.00006	.00007
	.99269	.99269	.99269	.99269	.99269	.99269	.99269	.99269	.99269	.99269	.99270
.01	.00000	.00001	.00002	.00003	.00004	.00005	.00005	.00005	.00005	.00006	.00007
	.99269	.99269	.99269	.99269	.99269	.99269	.99269	.99269	.99269	.99269	.99270
.02	.00000	.00003	.00005	.00008	.00011	.00013	.00016	.00019	.00022	.00024	.00027
	.98539	.98539	.98539	.98539	.98539	.98539	.98539	.98539	.98539	.98540	.98540
.03	.00000	.00006	.00012	.00018	.00024	.00030	.00036	.00042	.00046	.00055	.00061
	.97809	.97809	.97809	.97809	.97809	.97810	.97810	.97810	.97810	.97811	.97811
.04	.00000	.00011	.00022	.00032	.00043	.00054	.00065	.00075	.00086	.00097	.00108
	.97080	.97080	.97080	.97080	.97090	.97090	.97090	.97090	.97090	.97093	.97094
.05	.00000	.00017	.00034	.00050	.00067	.00084	.00101	.00117	.00134	.00151	.00168
	.96351	.96351	.96351	.96352	.96353	.96353	.96354	.96354	.96357	.96358	.96360
.06	.00000	.00024	.00048	.00072	.00097	.00121	.00145	.00169	.00193	.00217	.00241
	.95624	.95624	.95624	.95625	.95626	.95627	.95629	.95631	.95633	.95636	.95639
.07	.00000	.00033	.00066	.00098	.00131	.00161	.00197	.00229	.00262	.00294	.00327
	.94897	.94897	.94897	.94898	.94899	.94901	.94903	.94905	.94909	.94913	.94917
.08	.00000	.00043	.00086	.00120	.00171	.0214	.00256	.00299	.00341	.00383	.00425
	.94172	.94172	.94173	.94175	.94178	.94181	.94185	.94190	.94195	.94202	.94209
.09	.00000	.00054	.00108	.00162	.00216	.00270	.00323	.00377	.00430	.00483	.00536
	.93449	.93449	.93451	.93453	.93457	.93461	.93467	.93474	.93482	.93490	.93500
.10	.00000	.00067	.00133	.00199	.00266	.00332	.00398	.00464	.00529	.00594	.00659
	.92727	.92727	.92730	.92733	.92738	.92744	.92752	.92761	.92772	.92784	.92787

$U/K+IV/K'$
 -1
 $U+IV=SN$
 $(A+IB)$

K=SIN 55

I/B	A= 0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
.01	.00000 .99295	.00001 .99295	.00002 .99295	.00003 .99295	.00004 .99295	.00005 .99295	.00006 .99295	.00007 .99295	.00008 .99295	.00009 .99295	.00006 .99295
.02	.00000 .98590	.00002 .98590	.00005 .98590	.00007 .98590	.00010 .98590	.00012 .98590	.00014 .98590	.00017 .98590	.00019 .98590	.00022 .98590	.00024 .98590
.03	.00000 .97885	.00005 .97885	.00011 .97885	.00016 .97885	.00022 .97885	.00027 .97885	.00032 .97885	.00036 .97885	.00043 .97885	.00049 .97885	.00054 .97885
.04	.00000 .97181	.00010 .97181	.00019 .97181	.00029 .97182	.00038 .97182	.00043 .97182	.00048 .97182	.00057 .97183	.00067 .97183	.00077 .97184	.00086 .97185
.05	.00000 .96478	.00015 .96478	.00030 .96478	.00045 .96479	.00060 .96479	.00075 .96479	.00090 .96480	.00105 .96481	.00119 .96482	.00134 .96484	.00149 .96487
.06	.00000 .95775	.00022 .95776	.00043 .95776	.00064 .95776	.00086 .95776	.00107 .95776	.00129 .95776	.00150 .95776	.00172 .95776	.00193 .95776	.00214 .95776
.07	.00000 .95074	.00029 .95075	.00058 .95075	.00088 .95075	.00117 .95076	.00146 .95076	.00175 .95076	.00204 .95076	.00233 .95076	.00262 .95076	.00291 .95076
.08	.00000 .94374	.00033 .94374	.00076 .94375	.00114 .94375	.00152 .94375	.00190 .94375	.00220 .94375	.00266 .94375	.00304 .94375	.00341 .94375	.00379 .94375
.09	.00000 .93675	.00048 .93675	.00096 .93675	.00144 .93675	.00192 .93675	.00240 .93675	.00280 .93675	.00335 .93675	.00383 .93675	.00430 .93675	.00477 .93675
.10	.00000 .92978	.00055 .92978	.00118 .92978	.00178 .92984	.00237 .92984	.00296 .92984	.00354 .92984	.00413 .92984	.00471 .93021	.00529 .93021	.00587 .93046

$U/K+IV/K'$
 \sim_1
 $U+IV=SN \quad (A+iB)$

$K=\sin 6.0$

1/B	A= 0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
.01	.00000	.00001	.00002	.00003	.00004	.00005	.00006	.00007	.00008	.00009	.000005
	.99315	.99315	.99315	.99315	.99315	.99315	.99315	.99315	.99315	.99315	.99315
.02	.00000	.00002	.00004	.00006	.00009	.00011	.00013	.00015	.00017	.00019	.00021
	.98630	.98630	.98630	.98630	.98630	.98630	.98630	.98630	.98631	.98631	.98631
.03	.00000	.00005	.00010	.00014	.00019	.00024	.00029	.00034	.00038	.00043	.00046
	.97946	.97946	.97946	.97946	.97946	.97946	.97946	.97946	.97947	.97947	.97948
.04	.00000	.00009	.00017	.00026	.00034	.00043	.00051	.00060	.00068	.00077	.00085
	.97262	.97262	.97262	.97262	.97263	.97263	.97264	.97264	.97265	.97265	.97266
.05	.00000	.00013	.00027	.00040	.00053	.00067	.00080	.00093	.00107	.00120	.00133
	.96578	.96579	.96579	.96579	.96580	.96581	.96581	.96583	.96584	.96585	.96587
.06	.00000	.00019	.00038	.00058	.00077	.00096	.00115	.00134	.00153	.00172	.00191
	.95896	.95896	.95896	.95897	.95898	.95900	.95901	.95903	.95905	.95908	.95910
.07	.00000	.00026	.00052	.00076	.00104	.00130	.00156	.00182	.00208	.00234	.00260
	.95214	.95214	.95215	.95216	.95218	.95220	.95223	.95225	.95229	.95233	.95237
.08	.00000	.00034	.00068	.00102	.00136	.00170	.00204	.00237	.00271	.00305	.00338
	.94534	.94534	.94535	.94537	.94539	.94542	.94546	.94551	.94556	.94562	.94568
.09	.00000	.00043	.00086	.00123	.00172	.00214	.00257	.00300	.00342	.00384	.00425
	.93855	.93855	.93856	.93859	.93862	.93867	.93872	.93878	.93886	.93894	.93903
.10	.00000	.00053	.00106	.00159	.00211	.00264	.00316	.00369	.00421	.00473	.00524
	.93177	.93177	.93179	.93183	.93187	.93193	.93201	.93209	.93219	.93230	.93243

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 65

		A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
.01	.00000	.00000	.00001	.00001	.00002	.00002	.00003	.00003	.00004	.00004	.00005	
	.99331	.99331	.99331	.99331	.99331	.99331	.99331	.99331	.99331	.99331	.99331	
.02	.00000	.00002	.00004	.00006	.00008	.00010	.00011	.00013	.00015	.00017	.00019	
	.98662	.98662	.98662	.98662	.98662	.98662	.98662	.98662	.98662	.98662	.98662	
.03	.00006	.00004	.00009	.00013	.00017	.00021	.00026	.00030	.00034	.00039	.00043	
	.97993	.97993	.97993	.97993	.97993	.97994	.97994	.97994	.97994	.97995	.97995	
6	.04	.00008	.00015	.00023	.00031	.00034	.00046	.00053	.00061	.00069	.00076	
	.97325	.97325	.97325	.97326	.97326	.97326	.97327	.97327	.97328	.97329	.97329	
.05	.00000	.00000	.00024	.00036	.00048	.00060	.00071	.00083	.00095	.00107	.00119	
	.96657	.96658	.96658	.96658	.96659	.96660	.96660	.96662	.96663	.96664	.96666	
.15	.00000	.00017	.00034	.00051	.00069	.00085	.00103	.00120	.00137	.00154	.00171	
	.95991	.95991	.95991	.95992	.95992	.95994	.95994	.95996	.95996	.96000	.96005	
.07	.00000	.00023	.00047	.00070	.00093	.00116	.00140	.00163	.00186	.00205	.00232	
	.95325	.95325	.95326	.95327	.95328	.95328	.95329	.95333	.95339	.95343	.95347	
.08	.00000	.00030	.00061	.00091	.00121	.00152	.00182	.00212	.00242	.00272	.00302	
	.94660	.94660	.94661	.94661	.94662	.94663	.94663	.94672	.94676	.94681	.94693	
.09	.00000	.00036	.00077	.00115	.00153	.00191	.00230	.00268	.00305	.00343	.00381	
	.93996	.93996	.93998	.94000	.94003	.94004	.94013	.94019	.94026	.94034	.94043	
.10	.00000	.00047	.00094	.00142	.00189	.00231	.00283	.00329	.00376	.00422	.00468	
	.93335	.93334	.93336	.93339	.93344	.93350	.93357	.93365	.93375	.93386	.93398	

$$U+IV = S_{\text{DN}} \cdot (A+IB)$$

K=STN 70

1/B		A = 0.00	A = .10	A = .20	A = .30	A = .40	A = .50	A = .60	A = .70	A = .80	A = .90	A = 1.00
.31	.00000	.000001	.000001	.000001	.000001	.000002	.000002	.000003	.000003	.000004	.000004	.00004
	.99343	.99343	.99343	.99343	.99343	.99343	.99343	.99343	.99343	.99343	.99343	.99343
.02	.00000	.00002	.00003	.00005	.00007	.00008	.00010	.00012	.00014	.00015	.00017	.00017
	.98686	.98686	.98686	.98686	.98686	.98687	.98687	.98687	.98687	.98687	.98687	.98687
.03	.00000	.00004	.00006	.00011	.00015	.00019	.00023	.00027	.00031	.00034	.00036	.00036
	.98030	.98030	.98030	.98030	.98030	.98030	.98031	.98031	.98031	.98031	.98031	.98031
.04	.00000	.00007	.00014	.00020	.00027	.00034	.00041	.00047	.00054	.00061	.00066	.00066
	.97374	.97374	.97374	.97374	.97375	.97375	.97375	.97376	.97377	.97377	.97378	.97378
.05	.00000	.00011	.00021	.00032	.00042	.00053	.00064	.00074	.00085	.00095	.00106	.00106
	.96719	.96719	.96719	.96719	.96720	.96721	.96721	.96722	.96724	.96725	.96727	.96727
.06	.00000	.00015	.00030	.00046	.00061	.00076	.00091	.00106	.00122	.00137	.00152	.00152
	.96064	.96064	.96064	.96065	.96065	.96067	.96069	.96071	.96073	.96075	.96078	.96078
.07	.00000	.00021	.00041	.00062	.00083	.00103	.00124	.00145	.00165	.00186	.00206	.00206
	.95410	.95410	.95411	.95412	.95413	.95415	.95416	.95421	.95424	.95426	.95432	.95432
.08	.00000	.00027	.00054	.00081	.00108	.00135	.00162	.00186	.00215	.00242	.00268	.00268
	.94757	.94757	.94758	.94760	.94762	.94762	.94769	.94773	.94778	.94784	.94790	.94790
.09	.00000	.00034	.00066	.00102	.00136	.00170	.00204	.00238	.00272	.00305	.00339	.00339
	.94105	.94105	.94107	.94109	.94112	.94117	.94122	.94128	.94135	.94143	.94152	.94152
.10	.00000	.00042	.00084	.00126	.00168	.00210	.00251	.00293	.00334	.00375	.00416	.00416
	.93454	.93454	.93457	.93460	.93465	.93465	.93473	.93477	.93495	.93506	.93506	.93518

$U/K + IV/K'$
 \sim_1
 $U+IV=SN \quad (A+IB)$

K=SIN 75

$1/B$	$A=0.00$	$A= .10$	$A= .20$	$A= .30$	$A= .40$	$A= .50$	$A= .60$	$A= .70$	$A= .80$	$A= .90$	$A= 1.00$
.01	.00000	.00000	.00001	.00001	.00001	.00001	.00002	.00003	.00003	.00003	.00004
	.99352	.99352	.99352	.99352	.99352	.99352	.99352	.99352	.99352	.99352	.99352
.02	.00000	.00001	.00003	.00004	.00006	.00007	.00009	.00010	.00012	.00015	.00015
	.96705	.96705	.96705	.96705	.96705	.96705	.96705	.96705	.96705	.96705	.96705
.03	.00000	.00003	.00007	.00010	.00013	.00017	.00020	.00024	.00027	.00030	.00034
	.98057	.98057	.98057	.98057	.98057	.98057	.98058	.98058	.98058	.98059	.98059
.04	.00000	.00006	.00012	.00018	.00024	.00030	.00036	.00042	.00048	.00054	.00060
	.97410	.97410	.97410	.97411	.97411	.97412	.97412	.97412	.97413	.97414	.97414
.05	.00000	.00009	.00019	.00028	.00037	.00047	.00056	.00065	.00074	.00084	.00093
	.95762	.95762	.95764	.95764	.95765	.95765	.95766	.95767	.95768	.95769	.95772
.06	.00000	.00013	.00027	.00040	.00054	.00067	.00080	.00094	.00107	.00120	.00134
	.96118	.96118	.96119	.96119	.96119	.96120	.96121	.96123	.96125	.96127	.96132
.07	.00000	.00013	.00036	.00055	.00073	.00091	.00109	.00127	.00145	.00163	.00181
	.95473	.95473	.95474	.95475	.95475	.95477	.95479	.95481	.95484	.95487	.95491
.08	.00000	.00024	.00048	.00071	.00095	.00119	.00142	.00166	.00189	.00213	.00236
	.94829	.94829	.94830	.94832	.94834	.94837	.94841	.94845	.94850	.94855	.94856
.09	.00000	.00030	.00060	.00090	.00120	.00150	.00180	.00210	.00239	.00269	.00298
	.94186	.94186	.94186	.94190	.94193	.94193	.94203	.94209	.94216	.94223	.94232
.10	.00000	.00037	.00074	.00111	.00143	.00185	.00221	.00258	.00294	.00331	.00367
	.93544	.93544	.93547	.93550	.93554	.93560	.93567	.93575	.93585	.93595	.93607

$U/K+iV/K'$
 -1
 $U+iV=SN(A+iB)$

K=SIN 80

	A=0.0	A=.10	A=.20	A=.30	A=.40	A=.50	A=.60	A=.70	A=.80	A=.90	A=1.00
.01	.00100 .99359	.00000 .99359	.00001 .99359	.00001 .99359	.00002 .99359	.00002 .99359	.00002 .99359	.00003 .99359	.00003 .99359	.00003 .99359	.00003 .99359
.02	.00001 .98717	.00001 .98717	.00003 .98717	.00004 .98717	.00005 .98717	.00006 .98717	.00006 .98717	.00009 .98717	.00010 .98717	.00012 .98718	.00013 .98718
.03	.00000 .98076	.00000 .98076	.00003 .98076	.00006 .98076	.00009 .98076	.00012 .98076	.00014 .98076	.00017 .98077	.00020 .98077	.00026 .98077	.00029 .98078
.04	.00000 .97435	.00005 .97435	.00010 .97435	.00015 .97436	.00021 .97436	.00026 .97436	.00031 .97437	.00036 .97437	.00041 .97438	.00046 .97439	.00051 .97439
.05	.00000 .96795	.00008 .96795	.00016 .96795	.00024 .96796	.00032 .96796	.00040 .96797	.00048 .96797	.00056 .96798	.00064 .96799	.00072 .96800	.00080 .96803
.06	.00000 .96156	.00012 .96156	.00023 .96156	.00035 .96157	.00046 .96157	.00058 .96157	.00069 .96157	.00081 .96161	.00092 .96162	.00104 .96167	.00115 .96169
.07	.00000 .95517	.00016 .95517	.00031 .95518	.00047 .95519	.00053 .95520	.00067 .95522	.00073 .95525	.00084 .95527	.00116 .95531	.00141 .95534	.00156 .95536
.08	.00000 .94879	.00020 .94879	.00042 .94880	.00061 .94882	.00082 .94884	.00102 .94887	.00123 .94891	.00143 .94895	.00163 .94900	.00183 .94905	.00203 .94911
.09	.00000 .94242	.00026 .94243	.00052 .94244	.00078 .94246	.00103 .94249	.00129 .94254	.00155 .94259	.00160 .94265	.00206 .94271	.00231 .94279	.00257 .94288
.10	.00000 .93606	.00032 .93607	.00064 .93609	.00096 .93612	.00127 .93616	.00159 .93622	.00191 .93629	.00222 .93637	.00253 .93646	.00285 .93657	.00316 .93659

U/K+IV/K'
-
J+IV=SN ₋₁ (A+18)

K=SIN 85

		A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	$\beta = .60$	$\beta = .70$	$\beta = .80$	A= .90	A= 1.00
.01	.00000	*.99362	*.99362	*.99362	*.99362	*.99362	*.99362	*.99362	*.99362	*.99362	*.99362	*.99362
.02	.00000	*.98725	*.98725	*.98725	*.98725	*.98725	*.98725	*.98725	*.98725	*.98725	*.98725	*.98725
.03	.00000	*.98087	*.98087	*.98087	*.98087	*.98087	*.98087	*.98087	*.98087	*.98087	*.98087	*.98087
.04	.00000	*.97450	*.97450	*.97450	*.97450	*.97450	*.97450	*.97451	*.97451	*.97452	*.97453	*.97454
.05	.00000	*.96813	*.96814	*.96814	*.96814	*.96814	*.96815	*.96815	*.96815	*.96817	*.96820	*.96821
.06	.00009	*.96178	*.96178	*.96178	*.96179	*.96179	*.96180	*.96181	*.96181	*.96184	*.96186	*.96189
.07	.00000	*.95542	*.95543	*.95543	*.95543	*.95543	*.95546	*.95546	*.95546	*.95550	*.95553	*.95556
.08	.00000	*.94908	*.94909	*.94909	*.94911	*.94911	*.94913	*.94913	*.94913	*.94920	*.94924	*.94934
.09	.00000	*.94275	*.94277	*.94277	*.94279	*.94279	*.94282	*.94282	*.94285	*.94291	*.94297	*.94304
.10	.00000	*.93643	*.93645	*.93645	*.93646	*.93646	*.93653	*.93653	*.93656	*.93665	*.93673	*.93693

$U/K+IV/K'$
 -1
 $U+IV=SN$ (A+IB)

K=SIN 86

	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A=1.00
.01	*.00000	*.99363	*.99363	*.99363	*.99363	*.99363	*.99363	*.99363	*.99363	*.99363	*.99363
.02	*.00000	*.00001	*.00002	*.00003	*.00004	*.00005	*.00006	*.00007	*.00008	*.00009	*.00010
.03	*.00000	*.00002	*.00004	*.00007	*.00009	*.00011	*.00013	*.00016	*.00018	*.00020	*.00022
.04	*.00000	*.00004	*.00008	*.00009	*.00009	*.00009	*.00009	*.00009	*.00009	*.00009	*.00009
.05	*.00001	*.00006	*.00012	*.00016	*.00016	*.00020	*.00024	*.00028	*.00032	*.00036	*.00039
.06	*.00000	*.00005	*.00016	*.00022	*.00025	*.00031	*.00037	*.00043	*.00049	*.00055	*.00062
.07	*.00000	*.00000	*.00016	*.00024	*.00036	*.00051	*.00072	*.00096	*.00120	*.00156	*.00194
.08	*.00000	*.00016	*.00031	*.00047	*.00063	*.00073	*.00094	*.00110	*.00125	*.00141	*.00164
.09	*.00000	*.00027	*.00046	*.00060	*.00079	*.00099	*.00119	*.00139	*.00158	*.00178	*.00197
.10	*.00000	*.00024	*.00046	*.00074	*.00098	*.00122	*.00146	*.00171	*.00195	*.00219	*.00243

$$\begin{aligned} U/K + IV/K' \\ -1 \\ U+IV = SK \quad (A+IB) \end{aligned}$$

K=SIN 87

$\frac{1}{B}$	$A=0.00$	$A=+10$	$A=+20$	$A=+30$	$A=+40$	$A=+50$	$A=+60$	$A=+70$	$A=+80$	$A=+90$	$A=+100$
.01	*000000 *99363	*000000 *99363	*000000 *99363	*000001 *99363	*000001 *99363	*000001 *99363	*000002 *99363	*000002 *99363	*000002 *99363	*000002 *99363	*000002 *99363
.02	*000000 *98726	*000001 *98726	*000002 *98726	*000003 *98726	*000004 *98726	*000005 *98726	*000006 *98726	*000036 *98726	*000007 *98726	*000008 *98726	*000009 *98727
.03	*000000 *98089	*000002 *98089	*000004 *98089	*000005 *98089	*000006 *98089	*000008 *98089	*000010 *98089	*000115 *98090	*000117 *98091	*000119 *98091	*00021 *98091
.04	*000000 *97453	*000004 *97453	*000007 *97453	*000111 *97454	*000115 *97454	*000118 *97454	*000122 *97455	*000226 *97455	*000229 *97456	*00033 *97456	*00037 *97457
.05	*000000 *96817	*000006 *96817	*000112 *96818	*000117 *96818	*00023 *96818	*00023 *96819	*00025 *96819	*00035 *96820	*00046 *96821	*00052 *96822	*00057 *96825
.06	*000000 *96182	*000008 *96182	*000117 *96183	*000225 *96183	*00033 *96184	*00041 *96184	*00050 *96186	*00058 *96187	*00066 *96189	*00074 *96191	*00082 *96193
.07	*000000 *95548	*000011 *95548	*000123 *95549	*00034 *95550	*00045 *95551	*00056 *95553	*00067 *95556	*00079 *95558	*00090 *95562	*00101 *95565	*00112 *95569
.08	*000000 *94914	*000015 *94914	*000115 *94915	*00029 *94916	*00044 *94917	*00159 *94920	*00073 *94922	*00088 *94926	*00102 *94930	*00117 *94935	*00131 *94940
.09	*000000 *94282	*000019 *94282	*00027 *94284	*00056 *94286	*00074 *94289	*00093 *94293	*00111 *94298	*0126 *94304	*0148 *94311	*0166 *94319	*0184 *94327
.10	*000000 *93651	*000023 *93651	*00046 *93653	*00068 *93655	*00091 *93661	*00114 *93666	*00137 *93673	*00159 *93681	*00182 *93690	*00204 *93701	*00226 *93712

$$U \oplus IV = SN \quad (A + IB)$$

K=SIN 88

		A=1.00	A= .90	A= .80	A= .70	A= .60	A= .50	A= .40	A= .30	A= .20	A= .10	A= 0.00	A=1.00
.01	.00000	.99363	.99363	.00000	.99363	.00001	.99363	.00001	.99363	.00001	.99363	.00001	.99363
.02	.00000	.98727	.98727	.00002	.98727	.00003	.98727	.00004	.98727	.00005	.98727	.00006	.98727
.03	.00000	.98090	.98090	.00002	.98090	.00006	.98090	.00008	.98090	.00009	.98090	.00013	.98090
.04	.00000	.97454	.97454	.00003	.97454	.00010	.97454	.00013	.97455	.00017	.97455	.00020	.97456
.05	.00000	.96819	.96819	.00005	.96819	.00011	.96819	.00016	.96820	.00021	.96820	.00026	.96821
.06	.00000	.96184	.96184	.00008	.96184	.00015	.96185	.00023	.96186	.00030	.96187	.00038	.96189
.07	.00000	.95550	.95550	.00010	.95550	.00021	.95552	.00031	.95553	.00051	.95554	.00062	.95557
.08	.00000	.94916	.94916	.00013	.94916	.00027	.94918	.00040	.94919	.00054	.94921	.00167	.94924
.09	.00000	.94284	.94284	.00017	.94284	.00034	.94286	.00051	.94286	.00068	.94291	.00085	.94295
.10	.00000	.93653	.93653	.00021	.93653	.00042	.93654	.00062	.93654	.00093	.93655	.00125	.93656

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+iB)$

K=SIN 69

I/B	A=0.00	A=.10	A=.20	A=.30	A=.40	A=.50	A=.60	A=.70	A=.80	A=.90	A=1.00
.01	.00006 .99363	.00009 .99363	.00001 .99363	.00002 .99363	.00002 .99363						
.02	.00000 .98727	.00001 .98727	.00002 .98727	.00003 .98727	.00002 .98727	.00004 .98727	.00004 .98727	.00005 .98727	.00006 .98727	.00007 .98727	.00007 .98727
.03	.00000 .98991	.00002 .98991	.00003 .98991	.00005 .98991	.00007 .98991	.00009 .98991	.00010 .98991	.00012 .98991	.00013 .98991	.00015 .98992	.00017 .98992
.04	.00000 .97455	.00003 .97455	.00006 .97455	.00009 .97455	.00012 .97455	.00015 .97455	.00018 .97455	.00021 .97455	.00023 .97455	.00026 .97455	.00029 .97455
.05	.00000 .96819	.00005 .96819	.00009 .96820	.00014 .96820	.00018 .96821	.00021 .96821	.00024 .96821	.00028 .96822	.00032 .96822	.00037 .96824	.00041 .96826
.06	.00000 .96185	.00007 .96185	.00013 .96186	.00020 .96186	.00026 .96187	.00033 .96187	.00040 .96187	.00046 .96187	.00053 .96191	.00059 .96193	.00066 .96193
.07	.00000 .95551	.00009 .95551	.00018 .95551	.00027 .95553	.00036 .95554	.00045 .95556	.00054 .95558	.00063 .95561	.00072 .95564	.00080 .95566	.00089 .95572
.08	.00000 .94917	.00012 .94918	.00023 .94919	.00035 .94920	.00047 .94923	.00053 .94925	.00070 .94925	.00082 .94929	.00093 .94933	.00105 .94936	.00116 .94943
.09	.00000 .94285	.00015 .94286	.00030 .94287	.00044 .94289	.00059 .94293	.00074 .94297	.00086 .94302	.00103 .94308	.00118 .94314	.00132 .94322	.00147 .94331
.10	.00000 .93654	.00018 .93655	.00036 .93657	.00055 .93660	.00073 .93664	.00091 .93667	.00109 .93670	.00127 .93685	.00145 .93694	.00163 .93705	.00180 .93716

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+(B))$

K=SIN S

A/B	$A=0.00$	$A=0.10$	$A=0.20$	$A=0.30$	$A=0.40$	$A=0.50$	$A=0.60$	$A=0.70$	$A=0.80$	$A=0.90$	$A=1.00$
.10	.00000	.00477	.00953	.01429	.01905	.02380	.02855	.03328	.03801	.04273	.04743
	.74414	.74415	.74419	.74426	.74436	.74443	.74464	.74482	.74503	.74526	.74552
.20	.00000	.01142	.02284	.03423	.04560	.05603	.06621	.07944	.09061	.10170	.11272
	.59268	.59268	.59299	.59325	.59362	.59409	.59466	.59533	.59611	.59698	.59795
.30	.00300	.01753	.03503	.05248	.06985	.08712	.10425	.12123	.13804	.15465	.17104
	.49615	.49625	.49658	.49711	.49786	.49881	.49997	.50133	.50289	.50464	.50657
.40	.00000	.02305	.04605	.06894	.09168	.11422	.13650	.15850	.18015	.20142	.22228
	.42742	.42759	.42810	.42896	.43015	.43167	.43351	.43566	.43811	.44085	.44387
.50	.00000	.02798	.05580	.08362	.11113	.13832	.16513	.19147	.21729	.24252	.26711
	.37527	.37551	.37623	.37741	.37906	.38116	.38371	.38668	.39005	.39382	.39794
.60	.00000	.03233	.06456	.09659	.12829	.15958	.19035	.22050	.24993	.27853	.30630
	.33406	.33438	.33526	.33678	.33887	.34153	.34475	.34851	.35278	.35754	.36274
.70	.00000	.03614	.07216	.10793	.14333	.17823	.21249	.24600	.27900	.31019	.34065
	.30063	.30099	.30206	.30304	.30632	.30948	.31332	.31781	.32292	.32861	.33484
.80	.00005	.03944	.07875	.11779	.15644	.19453	.23190	.26840	.30384	.33807	.37092
	.27293	.27333	.27454	.27655	.27937	.28297	.28736	.29251	.29639	.30494	.31213
.90	.00000	.04229	.08445	.12635	.16784	.20875	.24892	.28811	.32612	.36273	.39774
	.24962	.25006	.25138	.25358	.25667	.26065	.26551	.27124	.27781	.28516	.29324
1.00	.00000	.04474	.08937	.13376	.17776	.22119	.26386	.30551	.34588	.38468	.42165
	.22976	.23022	.23163	.23398	.23729	.24157	.24683	.25307	.26025	.26834	.27725

$U/K + IV/K'$
 π_1
 $U + IV = SN \quad (A + IB)$

K=SIN 10

1/B	A=0.00	A= .10			A= .20			A= .30			A= .40			A= .50			A= .60			A= .70			A= .80			A= .90			A= 1.00		
		A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00																				
.10	.00000	.00314	.00627	.00941	.01253	.01566	.01877	.02188	.02498	.02807	.03114																				
	.82649	.82650	.82654	.82661	.82671	.82683	.82696	.82716	.82736	.82759	.82765																				
.20	.00000	.00935	.01070	.02802	.03731	.04656	.05576	.06490	.07397	.08296	.09186																				
	.68954	.68961	.68980	.69013	.69058	.69117	.69168	.69272	.69368	.69476	.69596																				
.30	.00000	.01571	.03139	.04701	.06255	.07797	.09326	.10839	.12332	.13805	.15254																				
	.58799	.58813	.58854	.58923	.59019	.59142	.59291	.59466	.59657	.59892	.60140																				
.40	.00000	.02151	.04297	.06433	.08552	.10651	.12723	.14765	.16772	.18739	.20664																				
	.51106	.51128	.51194	.52303	.51456	.51651	.51838	.52165	.52460	.52833	.53222																				
.50	.00000	.02668	.05327	.07970	.10590	.13177	.15724	.18225	.20672	.23059	.25379																				
	.45090	.45121	.45212	.45363	.45573	.45841	.46166	.46546	.46978	.47459	.47588																				
.60	.00000	.03121	.06231	.09319	.12376	.15391	.18353	.21252	.24079	.26624	.29679																				
	.40250	.40298	.40412	.40602	.40867	.41205	.41614	.42091	.42634	.43240	.43903																				
.70	.00030	.03514	.07016	.10494	.13934	.17323	.20649	.23898	.27056	.30112	.33054																				
	.36299	.36344	.36479	.36704	.37017	.37417	.37902	.38470	.39117	.39838	.40628																				
.80	.00000	.03055	.07696	.11512	.15287	.19006	.22654	.26213	.29666	.32997	.36190																				
	.32998	.33048	.33201	.33454	.33608	.34262	.34815	.35464	.36205	.37033	.37541																				
.90	.00000	.04148	.08283	.12392	.16460	.20471	.24406	.28244	.31963	.35542	.38960																				
	.30208	.30263	.30429	.30706	.31094	.31594	.32204	.32925	.33751	.34676	.35694																				
1.00	.00000	.04400	.08788	.13152	.17478	.21748	.25941	.30032	.33995	.37801	.41423																				
	.27324	.27883	.28059	.28353	.28768	.29305	.29965	.30747	.31649	.32664	.33784																				

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 15

1/B	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
.10	.00000	.00224	.00449	.00673	.00896	.01120	.01342	.01564	.01785	.02005	.02225
	.86390	.86391	.86395	.86401	.86409	.86420	.86433	.86448	.86467	.86487	.86509
.20	.00000	.00720	.01499	.02246	.02990	.03730	.04464	.05192	.05913	.06625	.07328
	.74463	.74470	.74491	.74525	.74573	.74634	.74709	.74797	.74898	.75011	.75137
.30	.00000	.01361	.02719	.04070	.05413	.06743	.08059	.09356	.10634	.11888	.13116
	.64709	.64725	.64773	.64851	.64962	.65102	.65273	.65473	.65702	.65959	.66243
.40	.00000	.01950	.03895	.05827	.07743	.09637	.11502	.13334	.15129	.16881	.18586
	.56056	.56092	.56092	.57092	.57272	.57503	.57783	.58110	.58462	.58899	.59356
.50	.00000	.02484	.04959	.07417	.09849	.12243	.14605	.16912	.19162	.21348	.23464
	.50697	.50534	.50612	.50823	.51074	.51394	.51782	.52235	.52752	.53327	.53960
.60	.00000	.02954	.05097	.08019	.11707	.14551	.17340	.20063	.22710	.25272	.27739
	.45279	.45325	.45462	.45689	.46005	.46409	.46899	.47471	.48122	.48849	.49645
.70	.00000	.03364	.06714	.10040	.13327	.16561	.19730	.22819	.25815	.28705	.31475
	.40942	.40996	.41157	.41425	.41799	.42278	.42859	.43539	.44314	.45180	.46128
.80	.00000	.03717	.07421	.11097	.14732	.18311	.21815	.25229	.28535	.31714	.34752
	.37293	.37354	.37535	.37838	.38026	.38083	.39464	.40240	.41128	.42120	.43209
.90	.00000	.04021	.08029	.12010	.15950	.19831	.23635	.27341	.30525	.34366	.37642
	.34191	.34257	.34454	.34784	.35247	.35843	.37572	.377432	.38419	.39527	.40746
1.00	.00000	.04282	.08552	.12797	.17005	.21155	.25227	.29197	.33036	.36715	.40207
	.31527	.31597	.31806	.32157	.32651	.33291	.34077	.35009	.36086	.37299	.38636

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+iB)$

K=SIN 20

		A= .00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
.10	.00000	.00172	.00245	.00517	.00688	.00860	.01031	.01201	.01371	.01540	.01708	
	.88505	.88506	.88509	.88515	.88522	.88532	.88543	.88557	.88573	.88591	.88611	
.20	.00000	.00611	.01221	.01829	.02434	.03034	.03630	.04220	.04803	.05378	.05945	
	.77951	.77958	.77978	.78012	.78059	.78111	.78192	.78278	.78376	.78437	.78609	
.30	.00000	.01169	.02335	.03495	.04645	.05782	.06904	.08007	.09090	.10146	.11180	
	.68808	.68808	.68825	.68875	.68959	.69075	.69224	.69405	.69617	.69858	.70129	.70427
.40	.00000	.01741	.03477	.05200	.06904	.08585	.10235	.11851	.13425	.14954	.16435	
	.61099	.61099	.61128	.61214	.61358	.61559	.61811	.62124	.62486	.62897	.63357	.63862
.50	.00000	.02277	.04515	.06794	.09016	.11202	.13342	.15429	.17455	.19411	.21291	
	.54646	.54646	.54689	.54812	.55017	.55302	.55666	.56106	.56620	.57205	.57857	.58572
.60	.00000	.02757	.05502	.08224	.10911	.13550	.16131	.18641	.21069	.23405	.25638	
	.49238	.49238	.49290	.49448	.49709	.50072	.50537	.51099	.51575	.52505	.53339	.54253
.70	.00000	.03178	.06343	.09481	.12578	.15620	.18591	.21478	.24265	.26939	.29484	
	.44673	.44673	.44736	.44922	.45232	.45665	.46213	.46890	.47677	.48574	.49575	.50674
.80	.00000	.03543	.07073	.10574	.14031	.17428	.20748	.23972	.27081	.30056	.32100	
	.40793	.40793	.40863	.41074	.41424	.41914	.42544	.43311	.44212	.45242	.46395	.47563
.90	.00000	.03858	.07702	.11519	.15292	.19004	.22635	.26162	.29562	.32811	.35866	
	.37466	.37466	.37545	.37774	.38157	.38694	.39386	.40233	.41233	.42382	.43672	.45094
1.00	.00000	.04128	.08244	.12335	.16385	.20377	.24287	.28090	.31756	.35256	.38560	
	.34598	.34598	.34679	.34922	.35329	.35903	.35646	.37560	.38645	.39898	.41312	.42876

$$U/K + IV/K' \\ -1 \\ U + IV \equiv SN \quad (A + I(B)$$

K=SIN 25

		A= .00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
1/8												
.10	.00000	.00139	.00278	.00415	.00555	.00693	.00831	.00968	.01105	.01241	.01377	.01500
	.89861	.89862	.89865	.89867	.89877	.89885	.89896	.89906	.89923	.89939	.89957	.89975
.20	.00000	.00509	.01016	.01522	.02025	.02524	.03019	.03509	.03992	.04468	.04936	.05404
	.89326	.89327	.89352	.89384	.89429	.89486	.89556	.89638	.89732	.89837	.89954	.90072
.30	.00000	.01008	.02013	.05012	.06001	.06978	.05940	.06883	.07806	.08705	.09578	.10448
	.71773	.71790	.71841	.71926	.72044	.72195	.72376	.72592	.72836	.73109	.73408	.73708
.40	.00000	.01547	.03088	.04616	.06125	.07603	.09062	.10478	.11851	.13180	.14456	.15732
	.64320	.64351	.64443	.64595	.64807	.65078	.65405	.65787	.66220	.66703	.67232	.67759
.50	.00000	.02070	.04129	.06170	.08181	.10154	.12078	.13946	.15748	.17477	.19125	.20768
	.57916	.57961	.58096	.58319	.58630	.59026	.59505	.60063	.60697	.61402	.62173	.62942
.60	.00000	.02549	.05085	.07596	.10009	.12491	.14850	.17133	.19328	.21424	.23410	.25496
	.52439	.52497	.52672	.52962	.53365	.53683	.54504	.55231	.56058	.56978	.57984	.58990
.7.	.00000	.02975	.05935	.08866	.11753	.14581	.17333	.19994	.22547	.24976	.27268	.30000
	.47750	.47820	.48029	.48377	.48862	.49483	.50236	.51118	.52122	.53242	.54469	.55688
.80	.00000	.03347	.06679	.09981	.13235	.16425	.19532	.22535	.25413	.28147	.30717	.33398
	.43720	.43799	.44037	.44133	.44987	.45899	.46565	.47233	.48746	.50048	.51477	.52908
.90	.00000	.03670	.07325	.10950	.14529	.18042	.21467	.24782	.27959	.30973	.33798	.36652
	.40240	.40326	.40586	.41021	.41630	.4241b	.43378	.44514	.45819	.47284	.48695	.49998
1.00	.00000	.03948	.07883	.11790	.15655	.19456	.23169	.26768	.30221	.33494	.36555	.39652
	.37216	.37308	.37505	.38048	.38702	.39548	.40589	.41026	.43254	.44868	.46652	.48466

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 30

A/B	$A=0.00$	$A= .10$	$A= .20$	$A= .30$	$A= .40$	$A= .50$	$A= .60$	$A= .70$	$A= .80$	$A= .90$	$A=1.00$
.10	.00000 .90802	.00116 .30803	.00231 .90805	.00347 .90810	.00462 .90816	.00577 .90824	.00692 .90833	.00807 .90845	.00921 .90856	.01034 .90868	.01147 .90889
.20	.00000 .62030	.00432 .62036	.00863 .62054	.01292 .62085	.01719 .62126	.02143 .62163	.02563 .62249	.02977 .62327	.03386 .62416	.03789 .62517	.04185 .62628
.30	.00000 .73988	.00876 .74005	.01750 .74056	.02617 .74140	.03476 .74258	.04322 .74408	.05154 .74589	.05969 .74691	.06764 .74841	.07537 .75018	.08285 .75685
.40	.00000 .66817	.01375 .66849	.02744 .66943	.04100 .67100	.05437 .67319	.06749 .67597	.08029 .67932	.09274 .68322	.10476 .68765	.11632 .69257	.12737 .69794
.50	.00000 .66526	.01674 .66575	.03738 .68710	.05582 .69954	.07395 .61283	.09169 .61701	.10693 .62205	.12558 .62792	.14156 .63456	.15676 .64193	.17118 .64936
.60	.00000 .55058	.02342 .55120	.04671 .55309	.06974 .55622	.09236 .56611	.11444 .57281	.13586 .58061	.15647 .58946	.17616 .59927	.19488 .60996	.21228 .62096
.70	.00000 .50312	.02766 .50389	.05516 .50618	.08235 .50998	.10926 .51529	.13514 .52207	.16041 .53026	.18469 .53986	.20763 .55079	.22994 .56292	.24997 .57617
.80	.00000 .46193	.03140 .46280	.06263 .46543	.09354 .46980	.12393 .47592	.15363 .48376	.18242 .49331	.21089 .50451	.23642 .51738	.26116 .53158	.28416 .54721
.90	.00000 .42607	.03466 .42703	.06917 .42992	.10335 .43475	.13702 .44157	.16997 .45026	.20198 .46094	.23277 .47354	.26207 .48881	.28959 .50863	.31586 .52287
1.00	.00000 .39472	.03749 .39575	.07485 .39884	.11190 .40401	.14846 .41131	.18436 .42076	.21929 .43239	.25297 .44620	.28505 .46214	.31517 .48013	.34297 .50888

U/K+IV/R
 -1
 U+IV=SN (a+B)

K=SIN 35

I/B	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
.10	.000000	.000399	.00197	.00296	.00394	.00492	.00591	.00688	.00785	.00882	.00976
	.91488	.91489	.91492	.91496	.91502	.91508	.91516	.91529	.91541	.91555	.91576
.20	.000000	.000373	.00745	.01116	.01494	.01843	.02211	.02569	.02921	.03262	.03689
	.833301	.833307	.833324	.833354	.833395	.833447	.833510	.833585	.833678	.833765	.833871
.30	.000000	.000669	.01535	.02295	.03047	.03784	.04515	.05226	.05918	.06598	.07248
	.756686	.75703	.75753	.75836	.75952	.76099	.76276	.76484	.76728	.76982	.77276
.40	.000000	.001226	.02446	.03653	.04842	.06036	.07140	.08238	.09296	.10389	.11273
	.68616	.68616	.68621	.68621	.69071	.69291	.69572	.69910	.70382	.71239	.71775
.50	.000000	.01696	.03381	.05040	.06620	.08278	.09818	.11393	.12721	.14864	.15325
	.626235	.626265	.62832	.63077	.63417	.63843	.64368	.64972	.65653	.66486	.67223
.60	.000000	.02146	.04278	.06382	.08445	.10552	.12389	.14245	.16085	.17659	.19195
	.57214	.57260	.57479	.57809	.58267	.58851	.59554	.60371	.61294	.62315	.63422
.70	.000000	.02559	.05102	.07612	.10073	.12465	.14773	.16977	.19068	.21086	.22796
	.52457	.52539	.52784	.53191	.53758	.54442	.55357	.56377	.57533	.58814	.60285
.80	.000000	.02930	.05842	.08718	.11540	.14247	.16937	.19468	.21856	.24877	.26110
	.48384	.48384	.48668	.49142	.49803	.50549	.51678	.52883	.54255	.55781	.57444
.90	.000000	.03256	.06494	.09697	.12845	.15715	.18882	.21718	.24383	.26877	.29139
	.44635	.44740	.45055	.45582	.46320	.47281	.48433	.49802	.51369	.53121	.55049
1.00	.000000	.03540	.07065	.10557	.13996	.17353	.20618	.23739	.26686	.29421	.31983
	.41534	.41621	.41873	.42441	.43242	.44275	.45552	.47063	.48885	.50765	.52921

$$\begin{aligned} U/K+IV/K' \\ -1 \\ U+IV-SH \quad (A+I(B) \end{aligned}$$

K=SIN 40

$A/8$	$A=0.00$	$A= .10$	$A= .20$	$A= .30$	$A= .40$	$A= .50$	$A= .60$	$A= .70$	$A= .80$	$A= .90$	$A=1.00$
.10	.00000	.00086	.00171	.00257	.00342	.00427	.00512	.00596	.00681	.00765	.00848
.20	.00000	.00326	.00651	.00975	.01297	.01617	.01933	.02245	.02553	.02855	.03152
.30	.00000	.00680	.01357	.02029	.02693	.03346	.03987	.04614	.05223	.05813	.06383
.40	.00000	.01097	.02188	.03267	.04329	.05367	.06376	.07351	.08268	.09182	.10038
.50	.00000	.01535	.03060	.04564	.06039	.07473	.08859	.10187	.11449	.12638	.13746
.60	.00000	.01962	.03911	.05831	.07709	.09531	.11283	.12952	.14527	.15995	.17347
.70	.00000	.02361	.04705	.07015	.09273	.11462	.13563	.15558	.17429	.19161	.20738
.80	.00000	.02722	.05426	.08093	.10701	.13231	.15660	.17963	.20118	.22101	.23691
.90	.00000	.03044	.06069	.09056	.11984	.14826	.17563	.20158	.22584	.24808	.26681
1.00	.00000	.03326	.06635	.09908	.13124	.16257	.19277	.22149	.24834	.27291	.29482

U+IV=SM (A+IB)

X=SIN 45

$A = 0.00$	$A = .10$	$A = .20$	$A = .30$	$A = .40$	$A = .50$	$A = .60$	$A = .70$	$A = .80$	$A = .90$	$A = 1.00$
-1.0	.00000	.00075	.00150	.00225	.00300	.00375	.00449	.00524	.00598	.00744
	.92410	.92411	.92413	.92417	.92422	.92429	.92437	.92446	.92457	.92466
.20	.00000	.00200	.00575	.00861	.01145	.01427	.01706	.01981	.02253	.02520
	.85039	.85044	.85061	.85360	.85125	.85174	.85232	.85301	.85379	.85565
.30	.00000	.00605	.01207	.01805	.02395	.02975	.03546	.04102	.04642	.05165
	.78067	.78083	.78131	.78211	.78321	.78462	.78632	.78830	.79054	.79384
.40	.00000	.00985	.01965	.02933	.03884	.04814	.05716	.06586	.07428	.08215
	.71617	.71649	.71745	.71903	.72122	.72400	.72734	.73122	.73559	.74841
.50	.00000	.01391	.02772	.04133	.05465	.06759	.08005	.09196	.10323	.11361
	.65750	.65801	.65953	.66205	.66555	.66998	.67530	.68144	.68834	.69592
.60	.00000	.01793	.03572	.05323	.07032	.08685	.10270	.11774	.13164	.14491
	.60473	.60544	.60755	.61107	.61593	.62210	.62950	.63806	.64767	.65821
.70	.00000	.02173	.04329	.06450	.08519	.10517	.12427	.14231	.15912	.17454
	.55763	.55852	.56120	.56565	.57152	.57967	.58912	.60007	.61239	.62592
.80	.00000	.02521	.05023	.07487	.09891	.12213	.14432	.16523	.18463	.21805
	.51575	.51680	.51998	.52525	.53258	.54193	.55333	.56655	.58148	.59793
.90	.00000	.02834	.05648	.08423	.11134	.13753	.16269	.18635	.20825	.24559
	.47856	.47975	.48333	.48930	.49766	.50831	.52144	.53673	.55411	.57335
1.00	.00000	.03111	.06203	.09257	.12249	.15153	.17937	.20565	.22998	.27115
	.44551	.44681	.45072	.45725	.46643	.47830	.49284	.50999	.52963	.55152

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 50

$A = 0.00$	$A = .10$	$A = .20$	$A = .30$	$A = .40$	$A = .50$	$A = .60$	$A = .70$	$A = .80$	$A = .90$	$A = 1.00$
.10 -.92727	.00067 .92730	.01133 .92733	.00199 .92738	.00266 .92744	.00332 .92752	.00398 .92761	.00464 .92772	.00529 .92781	.00594 .92797	.00659 .92797
.20 -.85643	.00256 .85648	.00511 .85664	.00765 .85690	.01016 .85727	.01269 .85773	.01516 .85830	.01761 .85897	.02002 .85973	.02239 .85058	.02472 .86152
.30 -.78910	.00000 .78910	.00541 .78925	.01080 .78972	.01614 .79050	.02142 .79158	.02661 .79296	.03169 .79462	.03665 .79656	.04147 .79875	.04613 .80119
.40 .72540	.00000 .72540	.00887 .72672	.01769 .72766	.02640 .72923	.03496 .73140	.04330 .73416	.05140 .73747	.05919 .74130	.06666 .74561	.07375 .75037
.50 .66896	.00000 .66896	.01261 .66947	.02513 .67101	.03746 .67354	.04951 .67705	.06119 .68149	.07242 .68681	.08312 .69295	.09323 .69984	.10269 .70738
.60 .61695	.00000 .61767	.01637 .61983	.03260 .62340	.04855 .62833	.06410 .63459	.07911 .64208	.09345 .65072	.10700 .66039	.11966 .67097	.13134 .68231
.70 .57023	.00000 .57115	.01996 .57391	.03974 .57847	.05918 .58480	.07810 .59284	.09632 .60250	.11367 .61365	.12997 .62616	.14508 .63985	.17115 .65451
.80 .52845	.00000 .52955	.02328 .53284	.04636 .53630	.06905 .54591	.09114 .55561	.11241 .56731	.13264 .58089	.15159 .59617	.16904 .61293	.19864 .63890
.90 .49116	.00000 .49241	.02629 .49615	.05237 .50239	.07804 .51111	.10307 .52223	.12720 .53585	.15016 .55168	.17166 .56960	.19139 .58935	.22444 .61058
1.00 .45789	.00000 .45926	.02897 .46337	.05774 .47024	.08611 .47989	.11383 .49233	.14064 .49233	.16620 .50755	.19015 .52544	.21209 .54583	.23166 .56843

$U/K+IV/K'$
 -1
 $U+IV=SN$ (A+IB)

K=SIN 55

$1/B$	$A=0.00$	$A= .10$	$A= .20$	$A= .30$	$A= .40$	$A= .50$	$A= .60$	$A= .70$	$A= .80$	$A= .90$	$A=1.00$
.10	.00000 .92976	.00059 .92980	.00110 .92984	.00170 .92989	.00237 .92995	.00296 .92995	.00356 .93002	.00413 .93011	.00471 .93021	.00529 .93033	.00567 .93046
.20	.00000 .86124	.00029 .86130	.00057 .86145	.00084 .86170	.00099 .86206	.00133 .86251	.001354 .86306	.001573 .86371	.001768 .86445	.002000 .86526	.002287 .86619
.30	.00000 .79586	.00085 .79601	.001969 .79647	.01446 .79630	.01921 .79630	.02386 .79965	.02842 .80126	.03286 .80317	.03717 .80532	.04134 .80771	.04535 .81032
.40	.00000 .73466	.00000 .73500	.01595 .73593	.02380 .73749	.03151 .73964	.03502 .74237	.04630 .74564	.05330 .74942	.06000 .75368	.06635 .75837	.07234 .76345
.50	.00000 .67633	.00000 .67684	.02278 .68036	.03395 .68292	.04485 .68643	.05541 .69086	.06554 .69617	.07518 .70229	.08426 .70914	.09273 .71664	.10055 .72469
.60	.00000 .62703	.00000 .62776	.02971 .62994	.04423 .63355	.05836 .63853	.07197 .64483	.08495 .65237	.09718 .66105	.10856 .67074	.11981 .68132	.12847 .69263
.70	.00000 .58071	.00000 .58165	.03639 .58446	.05417 .58911	.07143 .59556	.08802 .60373	.10376 .61353	.11850 .62462	.13208 .63744	.14436 .65120	.15531 .66588
.80	.00000 .53908	.00000 .54021	.04264 .54366	.06348 .54922	.08372 .55703	.10314 .56696	.12154 .57892	.13870 .59275	.15440 .60827	.16846 .62522	.18872 .64330
.90	.00000 .50176	.00000 .50308	.02428 .50695	.04836 .51341	.07202 .52242	.09503 .53395	.11714 .54791	.13609 .56415	.15758 .56415	.17533 .58245	.19108 .60252
1.00	.00000 .46836	.02685 .46981	.05350 .47409	.07973 .48124	.10531 .49126	.12996 .50419	.15332 .51994	.17507 .53841	.19483 .55936	.21224 .58246	.22697 .60723

$U/K + IV/K'$
 -1
 $U+IV = SN \quad (A+IB)$

K=SIN 60

$1/\beta$	$A=0.00$	$A= .10$	$A= .20$	$A= .30$	$A= .40$	$A= .50$	$A= .60$	$A= .70$	$A= .80$	$A= .90$	$A= 1.00$
.10	.00000	*.00053	*.00106	*.00159	*.00211	*.00264	*.00316	*.00369	*.00421	*.00473	*.00524
	.93177	.93177	.93179	.93183	.93187	.93193	.93201	.93205	.93219	.93230	.93243
.20	.00000	*.00050	*.0009	*.00112	*.0014	*.01014	*.01212	*.01408	*.01600	*.01790	*.01975
	.86504	.86513	.86528	.86553	.86587	.86632	.86636	.86749	.86821	.86902	.86991
.30	.00000	*.00036	*.00070	*.01300	*.01725	*.02143	*.02551	*.02950	*.03336	*.03710	*.04063
	.80127	.80143	.80188	.80263	.80367	.80500	.80658	.80846	.81057	.81292	.81546
.40	.00000	*.00021	*.01438	*.02146	*.02840	*.03516	*.04171	*.04800	*.05402	*.05972	*.06508
	.74136	.74167	.74260	.74414	.74627	.74897	.75221	.75595	.76116	.76479	.76973
.50	.00000	*.01035	*.02063	*.03073	*.04059	*.05012	*.05926	*.06793	*.07689	*.08359	*.09069
	.68645	.68654	.68799	.69052	.69402	.69845	.70374	.70983	.71653	.72407	.73205
.60	.00000	*.01357	*.02701	*.04020	*.05301	*.06534	*.07707	*.08809	*.09833	*.10769	*.11613
	.63527	.63601	.63820	.64183	.64684	.65318	.66074	.66943	.67911	.68966	.70031
.70	.00000	*.01669	*.03322	*.04942	*.06513	*.08013	*.09445	*.10775	*.11995	*.13096	*.14068
	.58933	.59028	.59314	.59786	.60439	.61265	.62254	.63391	.64659	.66038	.67584
.80	.00000	*.01962	*.03906	*.05811	*.07659	*.09427	*.11097	*.12647	*.14857	*.15312	*.16399
	.54769	.54905	.55251	.55524	.56620	.57631	.58846	.60247	.61814	.63519	.65331
.90	.00000	*.02232	*.04464	*.06614	*.08720	*.10739	*.12643	*.14405	*.15100	*.17403	*.18596
	.51063	.51196	.51594	.52257	.53182	.54362	.55787	.57441	.59298	.61326	.63482
1.00	.00000	*.02475	*.04930	*.07344	*.09691	*.11945	*.14074	*.16043	*.17516	*.19365	*.20654
	.47716	.47863	.48305	.49047	.50078	.51408	.53025	.54914	.57850	.59392	.61890

$U/K+IV/K'$
 $U+IV = SN^{-1} (A+IB)$

K=SIN 65

$1/B$	$A=0.00$	$A=.10$	$A=.20$	$A=.30$	$A=.40$	$A=.50$	$A=.60$	$A=.70$	$A=.80$	$A=.90$	$A=1.00$
.10	.00000 .93333	.00047 .93334	.00094 .93336	.00142 .93339	.00189 .93344	.00236 .93350	.00283 .93357	.00329 .93365	.00376 .93375	.00422 .93386	.00464 .93396
.20	.00000 .86812	.00183 .86815	.00366 .86830	.00547 .86854	.00726 .86888	.00907 .86932	.01084 .86985	.01259 .87047	.01431 .87117	.01600 .87197	.01766 .87284
.30	.00000 .86557	.00391 .80571	.00780 .80615	.01166 .80690	.01547 .80793	.01921 .80924	.02287 .81082	.02644 .81265	.02990 .81473	.03325 .81704	.03646 .81956
.40	.00000 .74668	.00649 .74698	.01293 .74791	.01930 .74943	.02553 .75155	.03161 .75422	.03749 .75743	.04314 .76113	.04853 .76530	.05363 .76988	.05844 .77482
.50	.00000 .69203	.00934 .69255	.01861 .69408	.02772 .69661	.03660 .70010	.04519 .70451	.05341 .70978	.06120 .71583	.06852 .72260	.07533 .72996	.08158 .73789
.60	.00000 .64191	.01226 .64265	.02445 .64486	.03636 .64850	.04796 .65353	.05903 .65987	.06962 .66744	.07956 .67613	.08674 .68580	.09312 .69639	.10465 .70749
.70	.00000 .59631	.01516 .59728	.03016 .60016	.04485 .60493	.05509 .61152	.07271 .61985	.08557 .62979	.09753 .64121	.10846 .65392	.11831 .66770	.12696 .68232
.80	.00000 .55506	.01766 .55624	.03557 .55975	.05290 .56557	.06967 .57365	.08570 .58389	.10076 .59617	.11473 .61030	.12737 .62606	.13856 .64316	.14819 .66127
.90	.00000 .51766	.02036 .51922	.04057 .52329	.06036 .53005	.07953 .53947	.09785 .55141	.11507 .56596	.13095 .58271	.14523 .60146	.15771 .62186	.16823 .64346
1.00	.00000 .43435	.02266 .46587	.04512 .49041	.06716 .49797	.08858 .50857	.10908 .52216	.12836 .53865	.14611 .55786	.16201 .57950	.17574 .60314	.18789 .62622

$U/K + IV/K'$
 $U+IV = SN_{-1}^{+}(A+IB)$

K=SIN 70

$1/B$	$A = 0.00$	$A = .10$	$A = .20$	$A = .30$	$A = .40$	$A = .50$	$A = .60$	$A = .70$	$A = .80$	$A = .90$	$A = 1.00$
.10	.00000 .93454	.00042 .93455	.00084 .93457	.00126 .93460	.00168 .93465	.00210 .93470	.00251 .93477	.00293 .93486	.00334 .93495	.00375 .93496	.00416 .93518
.20	.00000 .87044	.00163 .87049	.00326 .87064	.00487 .87088	.00646 .87121	.00806 .87164	.00965 .87216	.01121 .87277	.01274 .87347	.01425 .87425	.01573 .87511
.30	.00000 .86890	.00349 .86904	.00696 .86949	.01040 .86990	.01380 .87022	.01714 .87123	.02040 .87125	.02358 .87159	.02667 .87179	.02965 .87203	.03251 .87227
.40	.00000 .75082	.00580 .75113	.01156 .75204	.01725 .75356	.02283 .75565	.02826 .75831	.03351 .76149	.03855 .76516	.04333 .76929	.04791 .77382	.05210 .77672
.50	.00000 .69688	.00638 .69731	.01666 .69884	.02484 .70136	.03280 .70485	.04048 .70924	.04783 .71449	.05479 .72051	.06133 .72724	.06739 .73458	.07296 .74243
.60	.00000 .64713	.01104 .64787	.02197 .65008	.03268 .65373	.04307 .65677	.05304 .66512	.06250 .67269	.07136 .68135	.07955 .69181	.08781 .70148	.09378 .71261
.70	.00000 .60183	.01365 .60280	.02717 .60570	.04039 .61050	.05319 .61713	.06541 .62550	.07694 .63549	.08764 .64693	.09740 .65964	.10614 .67342	.11389 .68798
.80	.00000 .56074	.01614 .56193	.03211 .56549	.04774 .57137	.06284 .57953	.07725 .58987	.09078 .60224	.10326 .61645	.11453 .63226	.12446 .64938	.13296 .66747
.90	.00000 .52361	.01844 .52499	.03670 .52912	.05458 .53599	.07188 .54555	.08837 .55771	.10383 .57235	.11804 .58924	.13876 .60811	.14812 .62856	.15107 .65019
1.00	.00000 .49010	.02054 .49165	.04090 .49627	.06086 .50398	.08020 .51477	.09868 .52856	.11601 .54531	.13190 .56476	.14604 .58659	.15818 .61035	.16813 .63547

$U/K+IV/K'$
 $U+IV=SN$ $(A+IB)$
 -1

K=SIN 75

	1/B	A=0.00	A= .10	A= .20	A= .30	A= .40	A= .50	A= .60	A= .70	A= .80	A= .90	A= 1.00
.10	.00000 .93544	.00037 .93545	.00074 .93547	.00111 .93550	.00148 .93554	.00185 .93560	.00221 .93567	.00258 .93575	.00294 .93585	.00331 .93595	.00367 .93607	
.20	.00000 .87219	.00144 .87223	.00287 .87238	.00430 .87261	.00571 .87295	.00712 .87337	.00851 .87388	.00988 .87449	.01123 .87518	.01256 .87595	.01386 .87680	
.30	.00000 .81138	.00308 .81153	.00614 .81197	.00918 .81269	.01217 .81370	.01512 .81498	.01810 .81652	.02081 .81632	.02353 .82035	.02615 .82261	.02868 .82587	
.40	.00000 .75392	.00513 .75423	.01022 .75514	.01525 .75664	.02017 .75873	.02497 .75136	.02960 .76453	.03405 .76817	.03830 .77227	.04231 .77677	.04688 .78163	
.50	.00000 .70038	.00742 .70089	.01477 .70242	.02195 .70493	.02903 .70841	.03583 .71279	.04232 .71602	.04847 .72402	.05424 .73071	.05959 .73801	.06449 .74582	
.60	.00000 .65106	.00979 .65110	.01948 .65402	.02898 .65767	.03819 .66271	.04702 .66906	.05539 .67663	.06322 .68529	.07044 .69491	.07782 .70434	.08290 .71642	
.70	.00000 .60599	.01214 .60697	.02414 .60689	.03588 .61471	.04724 .62136	.05808 .62976	.06828 .63977	.07773 .65123	.08635 .66394	.09404 .67768	.10076 .69221	
.80	.00000 .56505	.01437 .56625	.02658 .53983	.04248 .57577	.05590 .58398	.06869 .59458	.08067 .60681	.09170 .62108	.10163 .63692	.11036 .65484	.11781 .67269	
.90	.00000 .52798	.01645 .52938	.03272 .53356	.04864 .54050	.06403 .55016	.07668 .56243	.09239 .57718	.10494 .59418	.11615 .61312	.12585 .63362	.13393 .65521	
1.00	.00000 .49448	.01634 .49605	.03651 .50074	.05431 .50856	.07155 .51948	.08797 .53346	.10374 .55036	.11739 .56997	.12984 .58193	.14048 .61577	.14913 .64049	

$U/K+IV/K'$
 -1
 $U+IV = SN \quad (A+IB)$

K=SIN 80

1/8		A=0.00	A= .10	A= .20	B= -.30	A= .40	A= .50	A= .50	B= .70	A= .70	A= .90	A= 1.00
.10	.00000	.00032	.00064	.00096	.00095	.00127	.00159	.00191	.00222	.00253	.00285	.00316
	.93606	.93607	.93609	.93611	.93612	.93616	.93617	.93629	.93637	.93646	.93657	.93669
.20	.00000	.00124	.00247	.00432	.00613	.00733	.00851	.00968	.01082	.01194	.01282	.01394
	.67339	.67344	.67358	.67415	.67457	.67508	.67567	.67636	.67712	.67797	.67875	.67977
.30	.00006	.00265	.00530	.01050	.01304	.01552	.01794	.02029	.02255	.02473	.02670	.02877
	.81311	.81325	.81369	.81541	.81663	.81821	.82080	.82282	.82426	.82670	.82877	.83074
.40	.00000	.00443	.00882	.01741	.02155	.02555	.02939	.03305	.03651	.03976	.04305	.04631
	.75607	.75638	.75729	.76086	.76343	.76663	.77026	.77434	.77882	.78365	.78842	.79319
.50	.00000	.00641	.01277	.02509	.03096	.03657	.04188	.04685	.05146	.05568	.05987	.06397
	.70288	.70339	.70491	.71038	.71525	.72047	.72645	.73312	.74039	.74816	.75616	.76416
.60	.00000	.00847	.01686	.03118	.03304	.04063	.04730	.05466	.06189	.06656	.07162	.07678
	.65380	.65454	.65676	.66546	.67181	.67937	.68602	.69762	.70883	.71987	.73091	.74205
.70	.00000	.01052	.02092	.03119	.04092	.05023	.05911	.06727	.07478	.08132	.08718	.09302
	.60891	.60989	.61281	.62155	.62432	.63273	.64276	.65422	.66692	.68065	.69514	.71065
.80	.00000	.01247	.02480	.03535	.04648	.05954	.06990	.07943	.08799	.09549	.103185	.11085
	.56807	.56927	.57288	.57884	.58710	.59754	.61001	.62430	.64016	.65728	.67530	.69338
.90	.00000	.01429	.02842	.03224	.05558	.06827	.08613	.09097	.10852	.11587	.12325	.13069
	.53105	.53246	.53667	.53887	.55339	.56574	.58056	.59762	.61561	.63712	.65869	.67875
1.00	.00000	.01595	.03174	.03721	.06217	.07641	.08970	.10182	.11255	.12167	.12986	.13805
	.49756	.49914	.50388	.50588	.52279	.53683	.55390	.57361	.59366	.61954	.64465	.67073

$$U/K + IV/K' = \infty$$

X=51N 85.

$1/B$	$A=0.00$	$A=+0.10$	$A=+0.20$	$A=+0.30$	$A=+0.40$	$A=+0.50$	$A=+0.60$	$A=+0.70$	$A=+0.80$	$A=+0.90$	$-A=1.00$
.10	.000000	.00026	.00052	.00078	.00104	.00129	.00155	.00181	.00206	.00232	-.00257
	.93643	.93643	.93645	.93648	.93653	.93658	.93665	.93673	.93683	.93693	-.93795
.20	.000000	.00101	.00201	.00301	.00401	.00493	.00597	.00693	.00788	.00881	-.00972
	.87410	.87415	.87429	.87452	.87485	.87527	.87576	.87637	.87705	.87781	-.87865
.30	.000000	.00216	.00431	.00644	.00855	.01062	.01264	.01461	.01652	.01836	-.02013
	.81412	.81426	.81470	.81541	.81641	.81768	.81921	.82098	.82308	.82523	-.82766
.40	.000000	.00361	.00719	.01073	.01419	.01756	.02082	.02395	.02692	.02974	-.03239
	.75734	.75765	.75855	.76005	.76212	.76473	.76787	.77149	.77556	.78882	-.78483
.50	.000000	.00523	.01041	.01550	.02046	.02524	.02981	.03413	.03816	.04194	-.04537
	.70435	.70486	.70638	.70888	.71234	.71671	.72191	.72789	.73454	.74188	-.74954
.60	.000000	.00692	.01376	.02047	.02696	.03313	.03986	.04458	.04965	.05427	-.05838
	.65542	.65616	.65838	.66204	.66708	.67343	.68096	.68693	.69922	.70961	-.72263
.70	.000000	.00859	.01708	.02539	.03341	.04106	.04824	.05490	.06094	.06633	-.07182
	.61063	.61161	.61454	.61939	.62107	.63449	.64452	.65598	.66668	.68239	-.69686
.80	.000000	.01019	.02026	.03011	.03960	.04864	.05709	.06484	.07181	.07791	-.08389
	.56985	.57106	.57458	.58066	.58894	.59941	.61190	.62621	.64298	.65919	-.67719
.90	.000000	.01168	.02324	.03454	.04544	.05580	.06547	.07430	.08215	.08892	-.09452
	.53287	.53429	.53852	.54554	.55530	.56761	.58255	.59965	.61867	.63919	-.66874
1.00	.000000	.01305	.02597	.03862	.05085	.06249	.07333	.08320	.09192	.09933	-.10531
	.49939	.50098	.50575	.51368	.52476	.53691	.55599	.57577	.59785	.62176	-.64685

$U/K+IV/K'$
 -1
 $U+IV=SK \quad (A+IB)$

K=SIN 86

$A = 0.00$	$A = .10$	$A = .20$	$A = .30$	$A = .40$	$A = .50$	$A = .60$	$A = .70$	$A = .80$	$A = .90$	$A = 1.00$
.10 .00000 .93647	.00024 .93650	.00049 .93653	.00073 .93657	.00098 .93663	.00122 .93667	.00146 .93670	.00171 .93678	.00195 .93687	.00219 .93697	.00243 .93709
.20 .00000 .87418	.00095 .87423	.00190 .87437	.00264 .87461	.00376 .87493	.00471 .87537	.00563 .87586	.00654 .87645	.00744 .87713	.00832 .87790	.00916 .87874
.30 .00000 .81424	.00204 .81438	.00407 .81462	.00609 .81553	.00807 .81653	.01003 .81780	.01193 .81932	.01379 .82110	.01560 .82311	.01734 .82534	.01901 .82778
.40 .00000 .75749	.00341 .75780	.00679 .75870	.01134 .76020	.01340 .76227	.01658 .76488	.01766 .76882	.02261 .77164	.02542 .77570	.02809 .78016	.03056 .78497
.50 .00000 .70452	.006494 .70503	.00963 .70655	.01464 .70906	.01932 .71252	.02384 .71628	.02815 .72099	.03224 .72886	.03606 .73471	.03960 .74196	.04285 .74971
.60 .00000 .65562	.00653 .65236	.00953 .65857	.01300 .66223	.01933 .66727	.02546 .67362	.03134 .68118	.03691 .68982	.04211 .69941	.04898 .70988	.05514 .72881
.70 .00000 .61083	.00811 .61182	.01614 .61475	.02398 .61959	.03156 .62628	.03873 .63470	.04557 .64473	.05185 .65619	.05756 .66689	.06264 .68264	.06787 .69787
.80 .00000 .57007	.00963 .57128	.01914 .57490	.02844 .58088	.03741 .58916	.04594 .59962	.05392 .61212	.06125 .62644	.06783 .64230	.07356 .65941	.07848 .57741
.90 .00000 .53309	.01104 .53450	.02195 .53674	.03263 .54577	.04292 .55553	.05271 .56793	.06184 .58279	.07018 .59990	.07760 .61092	.08399 .61892	.08926 .63943
1.00 .00000 .49961	.01233 .50123	.02454 .50597	.03649 .51391	.04604 .52499	.05902 .53915	.06927 .55624	.07868 .57682	.08683 .59812	.09382 .62202	.09946 .64712

$U/K + IV/K'$
 -1
 $U+IV = SN \quad (A+IB)$

K=SIN 67

$1/B$	$A=0.00$	$A=0.10$	$A=0.20$	$A=0.30$	$A=0.40$	$A=0.50$	$A=0.60$	$A=0.70$	$A=0.80$	$A=0.90$	$A=1.00$
.10	.00000 .93651	.00023 .93651	.00046 .93653	.00068 .93656	.00091 .93661	.00114 .93665	.00137 .93673	.00159 .93681	.00182 .93690	.00204 .93701	.00226 .93712
.20	.00000 .87425	.00009 .87430	.00017 .87444	.000265 .87467	.000353 .87500	.000440 .87542	.000526 .87592	.000610 .87720	.000694 .87796	.000776 .87796	.000856 .87789
.30	.00000 .81433	.000190 .81448	.000380 .81491	.000569 .81563	.000753 .81662	.000935 .81769	.001114 .81942	.001287 .82119	.001456 .82320	.001618 .82543	.001774 .82767
.40	.00000 .75761	.000318 .75791	.000634 .76031	.000945 .76238	.001251 .76500	.001548 .76813	.001835 .77175	.002110 .77581	.002373 .78027	.002621 .78503	.002854 .78927
.50	.00000 .70466	.000461 .70517	.000918 .70669	.001366 .70919	.001803 .71265	.002225 .71702	.002627 .72222	.003089 .72819	.003365 .73484	.003696 .74209	.003993 .74984
.60	.00000 .65577	.000610 .65651	.001213 .65872	.001804 .66238	.002377 .66742	.002925 .67377	.003445 .68133	.003930 .68997	.004377 .69558	.004783 .70994	.005146 .72096
.70	.00000 .61099	.000757 .61198	.001506 .61491	.002238 .61975	.002945 .62644	.003620 .63486	.004253 .64489	.004839 .65636	.005372 .66906	.005847 .66275	.006260 .69723
.80	.00000 .57023	.000899 .57144	.001787 .57505	.002655 .58105	.003492 .58933	.004283 .59980	.005033 .61230	.005717 .62661	.006331 .64248	.006868 .65959	.007324 .67758
.90	.00000 .533326	.001030 .53467	.002050 .53891	.003046 .54594	.004007 .55571	.004920 .56811	.005773 .58238	.006551 .60008	.007243 .61910	.007833 .63962	.008333 .65117
1.00	.00000 .49978	.001151 .50137	.002291 .51409	.003407 .50614	.004465 .52518	.005510 .53934	.006467 .55644	.007337 .57622	.008105 .59632	.008757 .62223	.009283 .54732

$U/K + IV/K'$
 -1
 $J+IV = SN - (A+19)$

K=SIN 86

		A=0.00	A=.10	A=.20	A=.30	A=.40	A=.50	A=.60	A=.70	A=.80	A=.90	A=1.00
.10	.000000	.00021	.00042	.00063	.00083	.00104	.00125	.00146	.00166	.00187	.00207	
	.93653	.93654	.93655	.93659	.93663	.93667	.93675	.93683	.93693	.93703	.93715	
.20	.000000	.00081	.00162	.00243	.00323	.00402	.00481	.00558	.00636	.00709	.00783	
	.87430	.87434	.87446	.87472	.87505	.87540	.87537	.87657	.87724	.87801	.87894	
.30	.000000	.00174	.00347	.00519	.00689	.00855	.01010	.01177	.01331	.01479	.01622	
	.81440	.81454	.81498	.81569	.81669	.81796	.81948	.82126	.82346	.82550	.82793	
.89	.000000	.00291	.00579	.01164	.01143	.01415	.01677	.01929	.02169	.02396	.02609	
	.75770	.75800	.75890	.76040	.76246	.76508	.76822	.77183	.77589	.78035	.78516	
.50	.000000	.00421	.00839	.01249	.01649	.02034	.02402	.02750	.03077	.03379	.03656	
	.70476	.70526	.70568	.70929	.71275	.71711	.72231	.72828	.73494	.74216	.74993	
.60	.000000	.00557	.01109	.01649	.02173	.02675	.03149	.03593	.04002	.04373	.04704	
	.65587	.65662	.65883	.66249	.66753	.67383	.68143	.69007	.69966	.71005	.72106	
.70	.000000	.00692	.01377	.02047	.02693	.03307	.03889	.04425	.04911	.05345	.05723	
	.61111	.61209	.61502	.61987	.62655	.63490	.64501	.65647	.66917	.68288	.69734	
.80	.000000	.00822	.01634	.02428	.03193	.03921	.04602	.05227	.05780	.06279	.06696	
	.57035	.57156	.57516	.58117	.58945	.59992	.61242	.62674	.64261	.65971	.67771	
.90	.000000	.00942	.01874	.02785	.03664	.04491	.05276	.05990	.06652	.07167	.07618	
	.53338	.53479	.53903	.54607	.55583	.56824	.58311	.60022	.61924	.63976	.66131	
1.00	.000000	.01053	.02095	.03115	.04101	.05033	.05913	.06709	.07411	.08007	.08489	
	.49990	.50149	.50627	.51121	.52531	.53946	.55658	.57637	.59847	.6237	.64747	

$U/K+IV/K'$
 $V+IV=SN^{-1}(A+B)$

K=SIN E9

$1/B$	$A=0.00$	$A=+1.0$	$A=-2.0$	$A=+3.0$	$A=-4.0$	$A=+5.0$	$A=-6.0$	$A=+7.0$	$A=-8.0$	$A=+9.0$	$A=-10.0$
.10	.00000 .93654	.00016 .93655	.00036 .93657	.00055 .93660	.00073 .93664	.00091 .93670	.00109 .93677	.00127 .93685	.00145 .93694	.00163 .93705	.00180 .93716
.20	.00000 .87432	.00071 .87437	.00141 .87451	.00212 .87475	.00281 .87507	.00351 .87543	.00419 .87600	.0046 .87654	.00533 .87727	.00619 .87803	.00683 .87887
.30	.00000 .81444	.0152 .81458	.00303 .81502	.00453 .81573	.00601 .81673	.00745 .81801	.00888 .81952	.01026 .82130	.01161 .82331	.01290 .82553	.01415 .82797
.40	.00000 .75775	.00254 .75805	.00505 .75895	.00754 .76045	.00997 .76251	.01234 .76513	.01463 .76826	.01683 .77188	.01892 .77594	.02090 .78040	.02276 .78521
.50	.00000 .70481	.0367 .70532	.00732 .70604	.01090 .70935	.01438 .71291	.01774 .71717	.02095 .72237	.02399 .72834	.02684 .73499	.02947 .74224	.03169 .74998
.60	.00000 .65594	.00486 .65659	.00968 .65890	.01435 .66255	.01896 .66759	.02533 .67194	.02747 .68150	.03134 .69014	.03491 .69913	.03814 .71011	.04104 .72112
.70	.00000 .61118	.00604 .61216	.01201 .61509	.01785 .61994	.02349 .62662	.02987 .63505	.03342 .64508	.03860 .65654	.04284 .66924	.04663 .68295	.04992 .69741
.80	.00000 .57042	.00717 .57163	.01425 .57525	.02118 .58124	.02746 .58953	.03421 .60500	.04015 .61250	.04560 .62681	.05049 .64288	.05478 .65979	.05841 .67778
.90	.00000 .53345	.03622 .53487	.01635 .53911	.02430 .54514	.03197 .55591	.03925 .56A31	.04605 .58319	.05225 .60030	.05777 .61932	.06252 .63984	.06646 .66139
.00	.00000 .49998	.00919 .50157	.01026 .50634	.02716 .51429	.03570 .52538	.04392 .53955	.05159 .55566	.05853 .57645	.06465 .59855	.06985 .62246	.07404 .64755

$$U + IV = S_1, \quad (14+18)$$

X-SIM 5

6	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10	1/A = .11	1/A = .12	1/A = .13	1/A = .14
0.00	.07307 1.00000	.14713 1.00000	.22352 1.00000	.30305 1.00000	.36840 1.00000	.40279 1.00000	.459312 1.00000	.59312 1.00000	.73979 1.00000	.90000 .93325	.00000 .05941	.00000 .05941	.00000 .05941	.00000 .05941
.10	.07307 .99997	.14713 .99968	.22331 .99971	.30305 .99946	.36639 .99908	.40276 .99851	.459304 .99753	.59304 .99516	.73944 .99516	.97718 .93266	.00000 .05935	.00000 .05935	.00000 .05935	.00000 .05935
.20	.07307 .99994	.14713 .99975	.22331 .99943	.30303 .999092	.36635 .99817	.40266 .99702	.459200 .99507	.59200 .99306	.73644 .99306	.95543 .93106	.00000 .05916	.00000 .05916	.00000 .05916	.00000 .05916
.30	.07307 .99991	.14713 .99963	.22330 .99914	.30300 .99836	.36628 .99726	.40250 .99554	.459240 .99261	.59240 .98564	.73674 .98564	.97732 .92875	.00000 .05890	.00000 .05890	.00000 .05890	.00000 .05890
.40	.07307 .99988	.14712 .99951	.22328 .99805	.30296 .99784	.38018 .99634	.40226 .99405	.462226 .99016	.59104 .98102	.73446 .98102	.91695 .92605	.00000 .05852	.00000 .05852	.00000 .05852	.00000 .05852
.50	.07307 .99985	.14712 .99938	.22326 .99856	.30290 .99730	.38006 .99543	.40200 .99257	.46200 .98773	.59113 .97654	.73165 .97654	.90012 .92316	.00000 .05603	.00000 .05603	.00000 .05603	.00000 .05603
.60	.07306 .99982	.14711 .99926	.22324 .99826	.30284 .99676	.36790 .99452	.40165 .99109	.46026 .98531	.59026 .97220	.72637 .97220	.84662 .92025	.00000 .05747	.00000 .05747	.00000 .05747	.00000 .05747
.70	.07306 .99974	.14710 .99914	.22321 .99799	.30276 .99623	.36773 .99361	.40125 .98962	.46025 .98291	.58925 .96862	.72466 .96862	.87023 .91734	.00000 .05682	.00000 .05682	.00000 .05682	.00000 .05682
.80	.07306 .99976	.14710 .99902	.22317 .99770	.30267 .99569	.36752 .99270	.40070 .98816	.46009 .98054	.58809 .96400	.72064 .96400	.85676 .91449	.00000 .05611	.00000 .05611	.00000 .05611	.00000 .05611
.90	.07306 .99973	.14706 .99889	.22313 .99742	.30257 .99515	.36726 .99179	.40025 .98669	.46025 .97819	.58679 .96015	.71632 .96015	.84406 .91172	.00000 .05534	.00000 .05534	.00000 .05534	.00000 .05534
1.00	.07306 .99970	.14707 .99877	.22309 .99713	.30246 .99461	.36702 .99069	.40002 .98524	.46002 .97586	.58536 .96524	.71177 .97586	.83201 .90905	.00000 .05452	.00000 .05452	.00000 .05452	.00000 .05452

$$\begin{aligned} U/K+IV/K' \\ -1 \\ U+IV=SN \quad (A+IB) \end{aligned}$$

K = SIN 10

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.03640	.07293	.10971	.14689	.18460	.22303	.26235	.30282	.34471	.38839
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.03640	.07293	.10971	.14689	.18460	.22302	.26234	.30279	.34467	.38833
	.99998	.99993	.99983	.99970	.99952	.99930	.99912	.99868	.99826	.9973
.20	.03640	.07293	.10971	.14689	.18460	.22299	.26229	.30272	.34456	.38816
	.99996	.99985	.99967	.99940	.99905	.99860	.99804	.99736	.99653	.99551
.30	.03640	.07293	.10971	.14687	.18456	.22295	.26222	.30260	.34438	.38789
	.99995	.99978	.99950	.99910	.99857	.99790	.99706	.99604	.99481	.99328
.40	.03640	.07293	.10970	.14685	.18452	.22288	.26211	.30244	.34412	.38751
	.99993	.99971	.99933	.99880	.99809	.99719	.99608	.99472	.99307	.99104
.50	.03640	.07292	.10969	.14683	.18448	.22280	.26198	.30222	.34379	.38699
	.99991	.99963	.99917	.99850	.99761	.99649	.99511	.99341	.99134	.98882
.60	.03640	.07292	.10968	.14680	.18442	.22270	.26181	.30196	.34338	.38639
	.99989	.99956	.99900	.99820	.99714	.99580	.99413	.99210	.99063	.98661
.70	.03640	.07292	.10966	.14677	.18436	.22259	.26162	.30165	.34291	.38567
	.99987	.99949	.99883	.99790	.99666	.99510	.99316	.99079	.98791	.98442
.80	.03640	.07291	.10965	.14673	.18428	.22245	.26140	.30129	.34236	.38485
	.99985	.99941	.99867	.99760	.99619	.99440	.99219	.98949	.98621	.98223
.90	.03640	.07291	.10963	.14669	.18420	.22230	.26114	.30089	.34175	.38392
	.99984	.99934	.99850	.99730	.99571	.99370	.99122	.98319	.98152	.98007
1.00	.03640	.07290	.10961	.14664	.18411	.22213	.26086	.30045	.34106	.38290
	.99982	.99926	.99833	.99700	.99524	.99301	.99026	.98690	.98284	.97793

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 15

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.02410 1.00000	.04840 1.00000	.07270 1.00000	.09712 1.00000	.12170 1.00000	.14648 1.00000	.17151 1.00000	.19684 1.00000	.22253 1.00000	.24865 1.00000
.10	.02410 .99999	.04840 .99994	.07270 .99987	.09712 .99977	.12169 .99964	.14647 .99946	.17150 .99929	.19683 .99906	.22251 .99879	.24862 .99848
.20	.02410 .99997	.04840 .99989	.07270 .99975	.09711 .99955	.12168 .99929	.14643 .99897	.17147 .99858	.19679 .99812	.22245 .99758	.24853 .99696
.30	.02410 .99996	.04840 .99983	.07270 .99962	.09711 .99932	.12167 .99893	.14643 .99845	.17143 .99786	.19672 .99717	.22235 .99637	.24839 .99544
.40	.02410 .99994	.04840 .99978	.07269 .99949	.09706 .99910	.12165 .99058	.14639 .99703	.17137 .99715	.19662 .99624	.22221 .99516	.24819 .99393
.50	.02410 .99993	.04840 .99972	.07269 .99937	.09706 .99887	.12162 .99822	.14634 .99742	.17128 .99644	.19650 .99530	.22203 .99396	.24793 .99242
.60	.02410 .99992	.04840 .99966	.07268 .99924	.09706 .9964	.12158 .99787	.14628 .99690	.17119 .99574	.19635 .99436	.22181 .99276	.24761 .99091
.70	.02410 .99990	.04839 .99961	.07267 .99911	.09704 .99842	.12154 .99751	.14621 .99638	.17107 .99505	.19617 .99343	.22155 .99156	.24724 .98942
.80	.02410 .99989	.04839 .99955	.07266 .99899	.09702 .99819	.12150 .99716	.14612 .99587	.17094 .99432	.19596 .99250	.22125 .99037	.24682 .98793
.90	.02410 .99987	.04839 .99950	.07265 .99886	.09699 .99797	.12144 .99680	.14603 .99536	.17078 .99362	.19573 .99157	.22091 .98919	.24634 .98645
1.00	.02410 .99986	.04838 .99944	.07264 .99874	.09696 .99774	.12138 .99645	.14593 .99484	.17061 .99292	.19547 .99064	.22053 .98801	.24580 .98498

U/K+IV/K'
-1
U+IV=SN (A+TB)

K=SIN 20

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.01005	.03612	.05422	.07236	.09060	.10892	.12734	.14589	.16459	.18346
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.01805	.03612	.05422	.07236	.09060	.10891	.12733	.14588	.16458	.18344
	.99999	.99995	.99989	.99981	.99970	.99957	.99941	.99923	.99902	.99877
.20	.01805	.03612	.05422	.07237	.09059	.10890	.12731	.14585	.16453	.18339
	.99998	.99991	.99979	.99962	.99941	.99914	.99883	.99846	.99803	.99755
.30	.01805	.03612	.05422	.07237	.09058	.10893	.12728	.14580	.16446	.18329
	.99996	.99986	.99968	.99946	.99911	.99872	.99824	.99769	.99705	.99632
.40	.01805	.03612	.05421	.07236	.09056	.10887	.12724	.14573	.16436	.18315
	.99995	.99981	.99958	.99935	.99882	.99824	.99766	.99692	.99667	.99510
.50	.01805	.03612	.05421	.07235	.09054	.10882	.12718	.14564	.16424	.18297
	.99994	.99977	.99947	.99906	.99852	.99786	.99707	.99615	.99509	.99388
.60	.01805	.03611	.05420	.07233	.09052	.10877	.12711	.14554	.16408	.18275
	.99993	.99972	.99937	.99887	.99823	.99744	.99649	.99539	.99411	.99267
.70	.01805	.03611	.05420	.07232	.09049	.10872	.12702	.14541	.16390	.18249
	.99992	.99967	.99926	.99868	.99793	.99701	.99591	.99462	.99314	.99146
.80	.01805	.03611	.05419	.07230	.09045	.10866	.12692	.14526	.16368	.18220
	.99991	.99963	.99916	.99850	.99754	.99659	.99533	.99386	.99217	.99026
.90	.01805	.03611	.05418	.07228	.09042	.10859	.12682	.14510	.16344	.18186
	.99989	.99958	.99905	.99831	.99735	.99615	.99475	.99310	.99121	.98906
1.00	.01805	.03610	.05417	.07226	.09037	.10851	.12669	.14491	.16318	.18149
	.99988	.99953	.99895	.99812	.99705	.99574	.99417	.99234	.99025	.98787

$U/K+IV/R^*$
 -1
 $U+IV=SK \quad (A+IB)$

K=SIN 25

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.01435 1.00000	.02871 1.00000	.04309 1.00000	.05750 1.00000	.07195 1.00000	.08644 1.00000	.10099 1.00000	.11562 1.00000	.13032 1.00000	.14511 1.00000
.10	.01435 .99999	.02871 .99996	.04309 .99991	.05750 .99984	.07194 .99974	.08644 .99963	.10099 .99949	.11561 .99933	.13031 .99915	.14510 .99894
.20	.01435 .99998	.02871 .99992	.04309 .99981	.05750 .99967	.07194 .99946	.08643 .99925	.10097 .99896	.11559 .99866	.13027 .99829	.14505 .99788
.30	.01435 .99997	.02871 .99988	.04309 .99972	.05749 .99951	.07193 .99923	.08641 .99868	.10095 .99847	.11555 .99799	.13022 .99744	.14497 .99652
.40	.01435 .99996	.02871 .99984	.04308 .99963	.05748 .99934	.07192 .99907	.08639 .99851	.10091 .99796	.11549 .99732	.13021 .99659	.14487 .99577
.50	.01435 .99995	.02871 .99979	.04308 .99954	.05748 .99918	.07190 .99871	.08636 .99813	.10087 .99745	.11542 .99665	.13004 .99574	.14473 .99471
.60	.01435 .99994	.02871 .99975	.04308 .99945	.05747 .99901	.07188 .99845	.08623 .99776	.10081 .99694	.11534 .99599	.12992 .99490	.14456 .99376
.70	.01435 .99993	.02871 .99971	.04307 .99935	.05745 .99885	.07185 .99819	.08628 .99739	.10074 .99644	.11524 .99532	.12970 .99405	.14436 .99262
.80	.01435 .99992	.02870 .99967	.04307 .99926	.05744 .99868	.07183 .99794	.08626 .99702	.10067 .99513	.11513 .99466	.12962 .99321	.14414 .99156
.90	.01435 .99991	.02870 .99963	.04306 .99917	.05742 .99852	.07180 .99768	.08618 .99665	.10058 .99542	.11500 .99400	.12943 .99238	.14388 .99054
1.00	.01435 .99990	.02870 .99959	.04305 .99908	.05741 .99835	.07176 .99742	.08612 .99623	.10049 .99492	.11485 .99334	.12822 .99154	.14359 .99051

$U/K + IV/K$
 -1
 $U+IV=SN \quad (A \wedge IB)$

K=SIN 30

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.01187	.02374	.03562	.04752	.05944	.07140	.08339	.09543	.10751	.11965
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.01187	.02374	.03562	.04752	.05944	.07140	.08339	.09542	.10750	.11964
	.99999	.99996	.99992	.99985	.99977	.99966	.99954	.99940	.99923	.99905
.20	.01187	.02374	.03562	.04752	.05944	.07139	.08337	.09540	.10747	.11960
	.99998	.99993	.99983	.99970	.99953	.99933	.99908	.99879	.99847	.99810
.30	.01187	.02374	.03562	.04751	.05943	.07138	.08335	.09537	.10743	.11954
	.99997	.99989	.99975	.99955	.99930	.99909	.99862	.99819	.99770	.99715
.40	.01186	.02373	.03561	.04751	.05942	.07136	.08332	.09532	.10736	.11945
	.99996	.99935	.99967	.99940	.99907	.99865	.99816	.99759	.99694	.99620
.50	.01186	.02373	.03561	.04750	.05941	.07133	.08329	.09527	.10728	.11934
	.99995	.99981	.99958	.99926	.99863	.99832	.99770	.99699	.99617	.99526
.60	.01186	.02373	.03561	.04749	.05939	.07131	.08324	.09520	.10719	.11920
	.99994	.99976	.99950	.99911	.99860	.99798	.99724	.99639	.99551	.99431
.70	.01186	.02373	.03560	.04748	.05937	.07127	.08319	.09512	.10707	.11904
	.99994	.99974	.99941	.99896	.99837	.99765	.99679	.99579	.99465	.99338
.80	.01186	.02373	.03560	.04747	.05935	.07123	.08313	.09503	.10694	.11885
	.99993	.99970	.99933	.99861	.99814	.99771	.99633	.99519	.99390	.99244
.90	.01186	.02373	.03559	.04746	.05932	.07119	.08305	.09492	.10676	.11865
	.99992	.99967	.99925	.99866	.99790	.99698	.99560	.99460	.99315	.99151
1.00	.01186	.02373	.03559	.04744	.05930	.07114	.08298	.09480	.10662	.12841
	.99991	.99963	.99916	.99851	.99767	.99664	.99542	.99451	.99240	.99059

$U/K + IV/K^*$
 -1
 $U+IV = SN \cdot (A - B)$

K=SIN 35

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.00	.01007	.02015	.03023	.04033	.05044	.06057	.07073	.08091	.09109	.10139
	.99999	.99999	.99999	.99999	.99999	.99999	.99999	.99999	.99999	.99999
.10	.91057	.02015	.03023	.04032	.05044	.06057	.07072	.08091	.09113	.10136
	.99999	.99997	.99992	.99986	.99978	.99969	.99958	.99944	.99929	.99913
.20	.01007	.02015	.03023	.04032	.05043	.06056	.07071	.08089	.09110	.10135
	.99998	.99993	.99985	.99972	.99957	.99938	.99915	.99909	.99959	.99025
.30	.01007	.02015	.03023	.04032	.05043	.06055	.07070	.08087	.09107	.10130
	.99997	.99990	.99977	.99959	.99935	.99907	.99873	.99833	.99800	.9973
.40	.01007	.02015	.03023	.04032	.05042	.06053	.07067	.08083	.09101	.10122
	.99997	.99986	.99959	.99945	.99914	.99876	.99831	.99777	.99718	.99651
.50	.01007	.02014	.03022	.04031	.05041	.06051	.07064	.08078	.09094	.10113
	.99996	.99983	.99961	.99931	.99902	.99845	.99788	.99723	.99648	.99564
.60	.01007	.02014	.03022	.04030	.05039	.06049	.07060	.08072	.09085	.10102
	.99995	.99979	.99954	.99925	.99871	.99811	.99745	.99667	.99578	.99477
.70	.01007	.02014	.03022	.04029	.05038	.06046	.07056	.08066	.09076	.10088
	.99994	.99976	.99946	.99904	.99849	.99783	.99714	.99612	.99538	.99391
.80	.01007	.02014	.03021	.04028	.05036	.06043	.07050	.08058	.09065	.10073
	.99993	.99973	.99938	.99890	.99828	.99752	.99662	.99551	.99439	.99305
.90	.01007	.02014	.03021	.04027	.05033	.06039	.07044	.08049	.09052	.10055
	.99992	.99969	.99931	.99876	.99807	.99721	.99620	.99503	.99365	.99220
1.00	.01007	.02014	.03020	.04026	.05031	.06035	.07038	.08039	.09038	.10035
	.99991	.99966	.99923	.99863	.99785	.99690	.99578	.99448	.99300	.99135

$U/K+IV/k^*$
 -1
 $U+IV=SN \quad (A+TB)$

K=SIN 40									
B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09
0.00	.00871 1.00000	.01742 1.00000	.02613 1.00000	.03486 1.00000	.04360 1.00000	.05235 1.00000	.06112 1.00000	.06991 1.00000	.07873 1.00000
.10	.00871 .99999	.01742 .99997	.02613 .99993	.03486 .99987	.04360 .99980	.05235 .99971	.06112 .99965	.06991 .99948	.07872 .99934
.20	.00871 .99998	.01742 .99994	.02613 .9996	.03486 .99974	.04360 .99960	.05235 .99942	.06111 .99921	.06990 .99896	.07870 .99868
.30	.00871 .99998	.01742 .99990	.02613 .99978	.03485 .99961	.04359 .99939	.05233 .99913	.06109 .99881	.06987 .99844	.07867 .99802
.40	.00871 .99997	.01742 .99987	.02613 .99971	.03485 .99948	.04358 .99919	.05232 .99884	.06107 .99841	.06984 .99792	.07862 .99736
.50	.00871 .99996	.01742 .99984	.02613 .99964	.03485 .99936	.04357 .99999	.05230 .99885	.06105 .99802	.06980 .99740	.07856 .99671
.60	.00871 .99995	.01742 .99981	.02613 .99957	.03484 .99923	.04356 .99879	.05228 .99826	.06101 .99762	.06969 .99689	.07849 .99605
.70	.00871 .99994	.01741 .99977	.02612 .99949	.03483 .99910	.04354 .99859	.05226 .99797	.06097 .99723	.06969 .99637	.07841 .99540
.80	.00871 .99994	.01741 .99974	.02612 .99942	.03482 .99939	.04353 .99768	.05223 .99683	.06093 .99536	.06962 .99475	.07831 .99350
.90	.00871 .99995	.01741 .99971	.02612 .99935	.03481 .99884	.04351 .99619	.05220 .99739	.06087 .99644	.06954 .99534	.07820 .99410
1.00	.00871 .99992	.01741 .99958	.02611 .99928	.03480 .99871	.04349 .99799	.05216 .99710	.06062 .99605	.06946 .99483	.07808 .99345

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 45

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.00763	.01526	.02289	.03052	.03819	.04585	.05352	.06122	.06893	.07666
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.00763	.01526	.02289	.03053	.03816	.04585	.05352	.06121	.06892	.07665
	.99999	.99997	.99993	.99986	.99981	.99972	.99962	.99951	.99937	.99923
.20	.00763	.01526	.02289	.03053	.03818	.04584	.05351	.06120	.06891	.07663
	.99998	.99994	.99986	.99976	.99962	.99945	.99925	.99901	.99875	.99845
.30	.00763	.01526	.02289	.03053	.03818	.04583	.05350	.06118	.06888	.07659
	.99996	.99991	.99979	.99963	.99943	.99917	.99887	.99852	.99813	.99768
.40	.00763	.01526	.02289	.03053	.03817	.04582	.05346	.06115	.06884	.07654
	.99997	.99988	.99973	.99951	.99923	.99890	.99850	.99803	.99750	.99691
.50	.00763	.01526	.02289	.03052	.03816	.04581	.05346	.06112	.06879	.07646
	.99996	.99985	.99966	.99939	.99904	.99862	.99812	.99754	.99688	.99614
.60	.00763	.01526	.02289	.03052	.03815	.04579	.05343	.06107	.06872	.07638
	.99995	.99982	.99959	.99927	.99885	.99835	.99774	.99705	.99626	.99537
.70	.00763	.01526	.02288	.03051	.03814	.04577	.05339	.06102	.06865	.07628
	.99995	.99979	.99952	.99914	.99886	.99807	.99737	.99656	.99564	.99461
.80	.00763	.01525	.02288	.03050	.03812	.04574	.05335	.06096	.06857	.07616
	.99994	.99976	.99945	.99902	.99847	.99780	.99700	.99607	.99502	.99385
.90	.00763	.01525	.02288	.03050	.03811	.04571	.05331	.06090	.06847	.07603
	.99993	.99973	.99938	.99900	.99828	.99752	.99662	.99559	.99441	.99309
1.00	.00763	.01525	.02287	.03049	.03809	.04568	.05326	.06082	.06836	.07586
	.99992	.99969	.99931	.99876	.99809	.99725	.99625	.99510	.99380	.99234

$\frac{U}{K} + \frac{IV}{V} - \frac{I}{K}$
 $U+IV=SN$ $(A+IB)$

K=SIN 50

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.00674 1.00000	.01349 1.00000	.02024 1.00000	.02700 1.00000	.03376 1.00000	.04053 1.00000	.04731 1.00000	.05411 1.00000	.06092 1.00000	.06775 1.00000
.10	.00674 .99999	.01349 .99997	.02024 .99993	.02700 .99988	.03376 .99982	.04053 .99974	.04731 .99964	.05411 .99953	.06092 .99940	.06774 .99926
.20	.00674 .99999	.01349 .99994	.02024 .99987	.02699 .99977	.03376 .99963	.04053 .99947	.04731 .99928	.05410 .99906	.06090 .99880	.06772 .99852
.30	.00674 .99998	.01349 .99991	.02024 .99990	.02699 .99965	.03375 .99945	.04052 .99921	.04729 .99892	.05408 .99859	.06088 .99821	.06769 .99778
.40	.00674 .99997	.01349 .99986	.02024 .99974	.02699 .99953	.03375 .99937	.04051 .99894	.04728 .99856	.05405 .99812	.06084 .99761	.06764 .99704
.50	.00674 .99996	.01349 .99985	.02024 .99967	.02699 .99941	.03374 .99908	.04049 .99868	.04726 .99820	.05402 .99765	.06080 .99701	.06758 .99631
.60	.00674 .99995	.01349 .99982	.02023 .99961	.02698 .99930	.03373 .99890	.04048 .99842	.04723 .99784	.05398 .99718	.06074 .99642	.06750 .99557
.70	.00674 .99995	.01349 .99980	.02023 .99954	.02698 .99918	.03372 .99872	.04046 .99815	.04720 .99746	.05394 .99671	.06068 .99583	.06741 .99484
.80	.00674 .99994	.01349 .99977	.02023 .99947	.02697 .99906	.03371 .99854	.04044 .99789	.04716 .99713	.05389 .99624	.06060 .99524	.06731 .99411
.90	.00674 .99993	.01349 .99974	.02023 .99941	.02696 .99895	.03369 .99835	.04041 .99763	.04713 .99677	.05363 .99578	.06052 .99465	.06719 .99339
1.00	.00674 .99993	.01349 .99971	.02022 .99934	.02695 .99883	.03367 .99817	.04038 .99737	.04708 .99641	.05376 .99531	.06042 .99407	.06706 .99267

$U/K + IV/K'$
 -1
 $U + IV = SN \quad (A+IB)$

K=SIN 55

B	1/A= .01	1/A= .02	1/A= .03	1/A= .04	1/A= .05	1/A= .06	1/A= .07	1/A= .08	1/A= .09	1/A= .10
0.00	.00500	.01200	.01301	.02401	.03003	.03605	.04208	.04813	.05418	.06025
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.00600	.01200	.01801	.02401	.03003	.03605	.04208	.04812	.05418	.06024
	.99999	.99997	.99994	.99989	.99982	.99975	.99965	.99955	.99942	.99929
.20	.00600	.01200	.01801	.02401	.03003	.03605	.04208	.04811	.05416	.06022
	.99999	.99994	.99987	.99977	.99965	.99949	.99930	.99909	.99885	.99857
.30	.00600	.01200	.01800	.02401	.03002	.03604	.04207	.04810	.05414	.06019
	.99998	.99992	.99981	.99966	.99947	.99924	.99898	.99864	.99827	.99786
.40	.00600	.01200	.01800	.02401	.03002	.03603	.04205	.04808	.05411	.06015
	.99997	.99989	.99975	.99955	.99929	.99894	.99861	.99818	.99770	.99715
.50	.00600	.01200	.01803	.02401	.03001	.03602	.04203	.04805	.05407	.06009
	.99996	.99986	.99968	.99943	.99912	.99871	.99826	.99773	.99712	.99644
.60	.00600	.01200	.01800	.02400	.03000	.03601	.04201	.04801	.05402	.06003
	.99996	.99983	.99962	.99932	.99894	.99847	.99792	.99728	.99655	.99573
.70	.00600	.01200	.01800	.02400	.02999	.03599	.04198	.04797	.05396	.05995
	.99995	.99980	.99956	.99921	.99876	.99822	.99757	.99683	.99598	.99503
.80	.00600	.01200	.01800	.02399	.02998	.03597	.04195	.04793	.05390	.05986
	.99994	.99977	.99949	.99910	.99859	.99796	.99723	.99638	.99541	.99433
.90	.00600	.01200	.01799	.02398	.02997	.03595	.04192	.04787	.05382	.05975
	.99994	.99975	.99943	.99898	.99841	.99771	.99688	.99593	.99484	.99363
1.00	.00600	.01200	.01799	.02398	.02995	.03592	.04188	.04782	.05374	.05964
	.99993	.99972	.99937	.99887	.99824	.99746	.99654	.99548	.99428	.99293

$U/K + IV/K'$
 -1
 $J+IV=SN$ (A+18)

K=SIN E0

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.00535	.01071	.01607	.02143	.02680	.03217	.03755	.04294	.04834	.05375
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.00535	.01071	.01607	.02143	.02680	.03217	.03755	.04294	.04834	.05375
	.99999	.99997	.99994	.99989	.99983	.99975	.99966	.99956	.99944	.99931
.20	.00535	.01071	.01607	.02143	.02680	.03217	.03755	.04293	.04833	.05373
	.99999	.99995	.99988	.99978	.99966	.99950	.99932	.99912	.99888	.99861
.30	.00535	.01071	.01607	.02143	.02679	.03216	.03754	.04292	.04831	.05371
	.99998	.99992	.99981	.99967	.99948	.99926	.99899	.99868	.99832	.99792
.40	.00535	.01071	.01607	.02143	.02679	.03215	.03752	.04290	.04826	.05367
	.99997	.99989	.99975	.99955	.99931	.99901	.99865	.99824	.99776	.99723
.50	.00535	.01071	.01607	.02142	.02678	.03214	.03751	.04287	.04824	.05362
	.99997	.99986	.99969	.99945	.99914	.99876	.99831	.99780	.99721	.99654
.60	.00535	.01071	.01606	.02142	.02677	.03213	.03749	.04284	.04820	.05356
	.99986	.99954	.99933	.99934	.99897	.99852	.99798	.99736	.99665	.99586
.70	.00535	.01071	.01606	.02141	.02677	.03211	.03746	.04281	.04815	.05349
	.99995	.99981	.99957	.99923	.99880	.99827	.99754	.99692	.99609	.99517
.80	.00535	.01071	.01606	.02141	.02676	.03210	.03743	.04277	.04809	.05341
	.99995	.99976	.99951	.99912	.99863	.99802	.99731	.99668	.99554	.99449
.90	.00535	.01071	.01606	.02140	.02674	.03208	.03740	.04272	.04802	.05331
	.99994	.99975	.99944	.99901	.99846	.99778	.99697	.99605	.99499	.99381
1.00	.00535	.01071	.01605	.02140	.02673	.03205	.03737	.04267	.04795	.05321
	.99993	.99973	.99936	.99900	.99829	.99753	.99664	.99561	.99446	.99314

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (\Lambda+\{B\})$

K=SIN 65

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
6.00	.00476	.00956	.01434	.01913	.02392	.02871	.03351	.03832	.04314	.04797
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.00476	.00956	.01434	.01913	.02392	.02871	.03351	.03832	.04314	.04796
	.99999	.99997	.99994	.99993	.99993	.99996	.99967	.99957	.99945	.99932
.20	.00476	.00956	.01434	.01913	.02391	.02871	.03351	.03831	.04313	.04795
	.99999	.99995	.99995	.99998	.99979	.99966	.99952	.99934	.99914	.99891
.30	.00476	.00956	.01434	.01912	.02391	.02870	.03350	.03830	.04311	.04792
	.99996	.99992	.99992	.99968	.99950	.99927	.99901	.99871	.99836	.99797
.40	.00476	.00956	.01434	.01912	.02391	.02870	.03349	.03828	.04308	.04789
	.99997	.99989	.99976	.99957	.99933	.99903	.99868	.99826	.99782	.99730
.50	.00476	.00956	.01434	.01912	.02390	.02869	.03347	.03826	.04305	.04785
	.99997	.99987	.99987	.99970	.99946	.99916	.99879	.99835	.99785	.99727
.60	.00476	.00956	.01434	.01912	.02390	.02868	.03345	.03823	.04301	.04779
	.99996	.99984	.99964	.99936	.99909	.99855	.99803	.99742	.99673	.99596
.70	.00476	.00956	.01434	.01911	.02389	.02866	.03343	.03820	.04297	.04773
	.99995	.99981	.99981	.99956	.99925	.99883	.99831	.99770	.99699	.99619
.80	.00476	.00956	.01433	.01911	.02388	.02865	.03341	.03816	.04231	.04766
	.99995	.99979	.99952	.99914	.99866	.99807	.99737	.99656	.99565	.99462
.90	.00476	.00956	.01433	.01910	.02387	.02863	.03336	.03812	.04286	.04758
	.99994	.99976	.9996	.99904	.99849	.99783	.99704	.99614	.99511	.99396
1.00	.00476	.00956	.01433	.01910	.02386	.02861	.03335	.03808	.04279	.04748
	.99993	.99973	.99940	.99833	.99753	.99672	.99571	.99456	.99330	

$U/K + IV/K'$
 -1
 $U+IV=SN \quad \{A+IB\}$

K=SIN 70

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.00425	.00650	.01275	.01701	.02126	.02553	.02979	.03407	.03835	.04264
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.00425	.00650	.01275	.01701	.02126	.02553	.02979	.03407	.03835	.04264
	.99999	.99997	.99994	.99999	.99984	.99975	.99966	.99958	.99946	.99934
.20	.00425	.00650	.01275	.01700	.02126	.02552	.02979	.03406	.03834	.04262
	.99999	.99995	.99988	.99979	.99967	.99953	.99935	.99915	.99893	.99867
.30	.00425	.00650	.01275	.01700	.02126	.02552	.02976	.03405	.03832	.04260
	.99998	.99992	.99982	.99968	.99951	.99929	.99903	.99873	.99839	.99801
.40	.00425	.00650	.01275	.01700	.02126	.02551	.02977	.03403	.03830	.04257
	.99997	.99999	.99976	.99956	.99934	.99905	.99871	.99831	.99786	.99735
.50	.00425	.00650	.01275	.01700	.02126	.02550	.02976	.03401	.03827	.04253
	.99997	.99967	.99970	.99947	.99926	.99881	.99830	.99789	.99732	.99669
.60	.00425	.00650	.01275	.01700	.02124	.02549	.02974	.03399	.03824	.04249
	.99996	.99984	.99965	.99937	.99901	.99858	.99816	.99747	.99679	.99603
.70	.00425	.00650	.01275	.01699	.02124	.02548	.02972	.03396	.03820	.04243
	.99995	.99982	.99959	.99926	.99905	.99834	.99774	.99705	.99626	.99538
.80	.00425	.00650	.01274	.01699	.02123	.02547	.02970	.03393	.03815	.04237
	.99995	.99979	.99953	.99916	.99868	.99811	.99742	.99663	.99573	.99472
.90	.00425	.00650	.01274	.01696	.02122	.02545	.02968	.03389	.03810	.04229
	.99994	.99976	.99947	.99905	.99852	.99787	.99719	.99621	.99520	.99407
1.00	.00425	.00650	.01274	.01698	.02121	.02543	.02965	.03385	.03804	.04221
	.99993	.99974	.99941	.99895	.99836	.99763	.99678	.99579	.99468	.99343

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+1B)$

K=SIN 75

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.00374	.00748	.01122	.01497	.01872	.02247	.02622	.02999	.03376	.03753
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.00374	.00748	.01122	.01497	.01872	.02247	.02622	.02999	.03375	.03753
	.99999	.99997	.99994	.99990	.99984	.99977	.99968	.99958	.99947	.99937
.20	.00374	.00748	.01122	.01497	.01871	.02247	.02622	.02998	.03374	.03752
	.99999	.99995	.99988	.99979	.99968	.99953	.99936	.99917	.99896	.99869
.30	.00374	.00748	.01122	.01497	.01871	.02246	.02621	.02997	.03373	.03750
	.99998	.99992	.99982	.99969	.99951	.99930	.99904	.99875	.99841	.99804
.40	.00374	.00748	.01122	.01496	.01871	.02246	.02620	.02996	.03371	.03747
	.99997	.99990	.99977	.99958	.99935	.99906	.99872	.99833	.99799	.99739
.50	.00374	.00748	.01122	.01496	.01870	.02245	.02619	.02994	.03369	.03744
	.99997	.99987	.99971	.99948	.99919	.99883	.99841	.99792	.99756	.99714
.60	.00374	.00748	.01122	.01496	.01870	.02244	.02618	.02992	.03366	.03739
	.99996	.99984	.99965	.99938	.99903	.99860	.99819	.99750	.99683	.99609
.70	.00374	.00748	.01122	.01496	.01869	.02243	.02616	.02989	.03362	.03734
	.99995	.99982	.99959	.99927	.99886	.99836	.99777	.99709	.99631	.99544
.80	.00374	.00748	.01122	.01495	.01869	.02242	.02614	.02986	.03358	.03729
	.99995	.99979	.99953	.99917	.99870	.99813	.99746	.99667	.99579	.99480
.90	.00374	.00748	.01122	.01495	.01868	.02240	.02612	.02983	.03353	.03722
	.99994	.99977	.99948	.99907	.99854	.99790	.99714	.99626	.99527	.99416
1.00	.00374	.00748	.01121	.01494	.01867	.02233	.02610	.02979	.03348	.03715
	.99994	.99974	.99942	.99896	.99838	.99767	.99683	.99585	.99475	.99352

$U/K+IV/K'$
 $\frac{-1}{1}$
 $U+IV=SN$ $(A+IB)$

K=SIN 80

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.00322	.00644	.00966	.01289	.01611	.01934	.02258	.02582	.02906	.03231
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.00322	.00644	.00966	.01289	.01611	.01934	.02258	.02582	.02906	.03231
	.99999	.99997	.99994	.99990	.99984	.99977	.99968	.99959	.99948	.99935
.20	.00322	.00644	.00966	.01289	.01611	.01934	.02257	.02581	.02905	.03230
	.99999	.99995	.99988	.99979	.99968	.99954	.99937	.99917	.99895	.99870
.30	.00322	.00644	.00966	.01289	.01611	.01934	.02257	.02580	.02904	.03228
	.99998	.99992	.99983	.99969	.99952	.99930	.99905	.99876	.99843	.99806
.40	.00322	.00644	.00966	.01288	.01611	.01933	.02256	.02579	.02902	.03226
	.99997	.99990	.99977	.99959	.99936	.99907	.99874	.99835	.99791	.99741
.50	.00322	.00644	.00966	.01288	.01610	.01933	.02255	.02578	.02900	.03223
	.99997	.99987	.99971	.99949	.99920	.99884	.99842	.99794	.99739	.99677
.60	.00322	.00644	.00966	.01288	.01610	.01932	.02254	.02576	.02908	.03219
	.99996	.99985	.99965	.99938	.99904	.99861	.99811	.99753	.99687	.99613
.70	.00322	.00644	.00966	.01288	.01609	.01931	.02252	.02574	.02894	.03215
	.99995	.99982	.99960	.99928	.99888	.99838	.99779	.99712	.99635	.99549
.80	.00322	.00644	.00966	.01287	.01609	.01930	.02251	.02571	.02891	.03210
	.99995	.99979	.99954	.99918	.99872	.99817	.99748	.99671	.99583	.99485
.90	.00322	.00644	.00966	.01287	.01608	.01929	.02249	.02568	.02867	.03205
	.99994	.99977	.99948	.99906	.99856	.99792	.99717	.99630	.99532	.99422
1.00	.00322	.00644	.00965	.01287	.01607	.01927	.02247	.02565	.02882	.03199
	.99994	.99974	.99942	.99897	.99763	.99686	.99589	.99480	.99358	

$$\begin{aligned} U/K + IV/K' \\ -1 \\ J+IV = SN \quad (A+B) \end{aligned}$$

K=Sin 85

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .09	1/A = .10
0.00	.00262	.00524	.00786	.01148	.01311	.01574	.01837	.02100	.02364
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.00262	.00524	.00786	.01148	.01311	.01574	.01837	.02100	.02364
	.99999	.99997	.99994	.99990	.99984	.99977	.99969	.99959	.99948
.20	.00262	.00524	.00786	.01148	.01311	.01574	.01836	.02100	.02363
	.99999	.99995	.99995	.99990	.99988	.99980	.99977	.99971	.99966
.30	.00262	.00524	.00786	.01148	.01311	.01573	.01836	.02099	.02352
	.99998	.99992	.99983	.99969	.99952	.99931	.99906	.99877	.99807
.40	.00262	.00524	.00786	.01148	.01310	.01573	.01835	.02098	.02361
	.99997	.99990	.99990	.99977	.99959	.99936	.99908	.99836	.99792
.50	.00262	.00524	.00786	.01148	.01310	.01572	.01835	.02097	.02359
	.99997	.99987	.99971	.99949	.99920	.99885	.99843	.99795	.99740
.60	.00262	.00524	.00786	.01148	.01310	.01572	.01834	.02095	.02357
	.99996	.99985	.99966	.99939	.99904	.99867	.99812	.99754	.99688
.70	.00262	.00524	.00786	.01148	.01310	.01571	.01832	.02094	.02355
	.99996	.99986	.99962	.99939	.99908	.99831	.99791	.99713	.99637
.80	.00262	.00524	.00786	.01147	.01309	.01570	.01831	.02092	.02352
	.99995	.99980	.99954	.99918	.99812	.99815	.99750	.99673	.99545
.90	.00262	.00524	.00786	.01147	.01308	.01563	.01830	.02089	.02349
	.99994	.99977	.99948	.99908	.99856	.99793	.99718	.99632	.99534
1.00	.00262	.00524	.00785	.01147	.01308	.01561	.01828	.02087	.02345
	.99994	.99974	.99943	.99988	.99841	.99770	.99697	.99592	.99483

$U/K + IV/K'$
 $J + IV - SN^{-1} (A + iB)$

K = SIN 86

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.00247	.00495	.00742	.00960	.01238	.01486	.01734	.01983	.02232	.02482
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.00247	.00495	.00742	.00960	.01238	.01486	.01734	.01983	.02232	.02482
	.99999	.99997	.99994	.99990	.99984	.99977	.99969	.99959	.99948	.99936
.20	.00247	.00495	.00742	.00960	.01238	.01486	.01734	.01983	.02231	.02481
	.99999	.99995	.99989	.99980	.99978	.99975	.99973	.99971	.99966	.99951
.30	.00247	.00495	.00742	.00960	.01237	.01485	.01734	.01982	.02231	.02480
	.99998	.99992	.99983	.99976	.99952	.99931	.99906	.99877	.99844	.99807
.40	.00247	.00495	.00742	.00960	.01237	.01485	.01733	.01981	.02229	.02478
	.99997	.99990	.99977	.99959	.99916	.99908	.99875	.99836	.99792	.99743
.50	.00247	.00495	.00742	.00960	.01237	.01485	.01732	.01980	.02228	.02476
	.99997	.99987	.99971	.99946	.99920	.99888	.99853	.99795	.99740	.99579
.60	.00247	.00495	.00742	.00960	.01237	.01484	.01731	.01978	.02226	.02473
	.99996	.99985	.99966	.99945	.99904	.99862	.99812	.99754	.99689	.99615
.70	.00247	.00495	.00742	.00960	.01236	.01484	.01730	.01977	.02223	.02469
	.99996	.99982	.99960	.99929	.99888	.99831	.99781	.9974	.99637	.99552
.80	.00247	.00495	.00742	.00960	.01236	.01483	.01729	.01975	.02221	.02466
	.99995	.99980	.99954	.99918	.99872	.99811	.99750	.99673	.99586	.99488
.90	.00247	.00495	.00742	.00960	.01235	.01482	.01727	.01973	.02217	.02462
	.99994	.99977	.99948	.99908	.99857	.99793	.99719	.99632	.99535	.99425
1.00	.00247	.00495	.00742	.00960	.01235	.01481	.01726	.01970	.02214	.02457
	.99994	.99975	.99943	.99908	.99858	.99771	.99688	.99592	.99454	.99363

$U/K+IV/K'$
 $U+IV=SN^{-1}(A+[6])$

K=STN 87

B	$1/A = .01$	$1/A = .02$	$1/A = .03$	$1/A = .04$	$1/A = .05$	$1/A = .06$	$1/A = .07$	$1/A = .08$	$1/A = .09$	$1/A = .10$
0.00	.00231 1.00000	.00462 1.00000	.00693 1.00000	.00924 1.00000	.01155 1.00000	.01386 1.00000	.01616 1.00000	.01850 1.00000	.02083 1.00000	.02316 1.00000
.10	.00231 .99999	.00462 .99997	.00693 .99994	.00924 .99990	.01155 .99984	.01386 .99977	.01616 .99969	.01850 .99959	.02083 .99948	.02316 .99936
.20	.00231 .99999	.00462 .99995	.00693 .99989	.00924 .99980	.01155 .99968	.01386 .99954	.01616 .99937	.01850 .99918	.02082 .99896	.02315 .99871
.30	.00231 .99998	.00462 .99992	.00693 .99983	.00924 .99969	.01155 .99952	.01386 .99931	.01616 .99906	.01849 .99877	.02081 .99844	.02316 .99837
.40	.00231 .99997	.00462 .99990	.00693 .99977	.00923 .99959	.01155 .99936	.01386 .99903	.01616 .99875	.01848 .99836	.02080 .99792	.02316 .99743
.50	.00231 .99997	.00462 .99987	.00692 .99967	.00923 .99949	.01154 .99920	.01385 .99885	.01616 .9983	.01867 .99795	.02079 .99740	.02316 .99679
.60	.00231 .99996	.00462 .99985	.00692 .99966	.00923 .99939	.01154 .99904	.01385 .99862	.01615 .99812	.01846 .99754	.02077 .99689	.02317 .99615
.70	.00231 .99996	.00462 .99982	.00692 .99960	.00923 .99929	.01154 .99888	.01384 .99839	.01614 .99701	.01845 .99614	.02075 .99637	.02316 .99552
.80	.00231 .99995	.00462 .99980	.00692 .99954	.00923 .99918	.01153 .99872	.01383 .99816	.01613 .99750	.01843 .99673	.02072 .9956	.02316 .99469
.90	.00231 .99994	.00462 .99977	.00692 .99948	.00923 .99908	.01153 .99857	.01382 .99793	.01612 .99719	.01841 .99633	.02069 .99535	.02316 .99426
1.00	.00231 .99994	.00461 .99975	.00692 .99943	.00922 .99908	.01152 .99841	.01381 .99771	.01610 .99680	.01838 .99592	.02066 .99484	.02316 .99363

$$U+2V=SS - \frac{1}{4}(A_1+A_3)$$

K-SIN 88

B	$1/A = .01$	$1/A = .52$	$1/A = .03$	$1/\bar{A} = .04$	$1/A = .05$	$1/A = .06$	$1/\bar{A} = .07$	$1/A = .08$	$1/\bar{A} = .09$	$1/A = .10$
0.00	.0 1.0	.00422 1.00000	.00633 1.00000	.00544 1.00000	.01056 1.00000	.01267 1.00000	.01479 1.00000	.01691 1.00000	.01904 1.00000	.02117 1.00000
.10	.00211 .99999	.00422 .99997	.00633 .99994	.00844 .99590	.01056 .99984	.01267 .99977	.01479 .99969	.01691 .99959	.01904 .99948	.02117 .99938
.20	.00211 .99999	.00422 .99995	.00633 .99989	.00844 .99983	.01056 .99968	.01267 .99954	.01479 .99937	.01691 .99918	.01903 .99896	.02116 .99871
.30	.00211 .99996	.00422 .99932	.00633 .99963	.00844 .99965	.01056 .99952	.01267 .99931	.01479 .99906	.01691 .99877	.01903 .99844	.02115 .99807
.40	.00211 .99997	.00422 .99990	.00633 .99977	.00844 .99915	.01055 .99936	.01267 .99926	.01479 .99975	.01690 .99836	.01901 .99792	.02113 .99743
.50	.00211 .99997	.00422 .99987	.00633 .99971	.00844 .99949	.01055 .99920	.01266 .99895	.01477 .99843	.01689 .99795	.01900 .99741	.02111 .99675
.60	.00211 .99996	.00422 .99985	.00633 .99966	.00844 .99939	.01055 .99904	.01266 .99862	.01477 .99812	.01688 .99754	.01908 .99689	.02109 .99615
.70	.00211 .99996	.00422 .99982	.00633 .99960	.00844 .99923	.01054 .99888	.01265 .99833	.01476 .99731	.01666 .99714	.01896 .99637	.02106 .99552
.80	.00211 .99995	.00422 .99980	.00633 .99954	.00843 .99918	.01054 .99873	.01264 .99815	.01475 .99750	.01684 .99673	.01894 .99586	.02103 .99509
.90	.00211 .99994	.00422 .99977	.00633 .99948	.00843 .99928	.01054 .99857	.01264 .99794	.01474 .99719	.01683 .99623	.01891 .99535	.02100 .99426
1.00	.00211 .99954	.00422 .99975	.00633 .99945	.00845 .99820	.01053 .99841	.01263 .99771	.01472 .99658	.01681 .99592	.01880 .99484	.02096 .99363

$UVA + IVAK^r$
 -1
 $UV = SN \quad (\lambda + 18)$

K=SIN 89

B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
0.00	.00184	.00268	.00352	.00436	.00521	.00605	.00689	.00773	.00857	.00941
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.00184	.00363	.00552	.00756	.00951	.01150	.01290	.01475	.01661	.01846
	.99999	.99997	.99994	.99990	.99984	.99977	.99969	.99959	.99949	.99936
.20	.00184	.00368	.00552	.00736	.00921	.01105	.01290	.01475	.01660	.01846
	.99999	.99995	.99989	.99980	.99970	.99954	.99937	.99918	.99896	.99871
.30	.00184	.00368	.00552	.00738	.00921	.01105	.01290	.01474	.01659	.01845
	.99998	.99991	.99983	.99975	.99962	.99931	.99906	.99877	.99847	.99807
.40	.00184	.00368	.00552	.00736	.00921	.01105	.01289	.01474	.01655	.01843
	.99997	.99990	.99987	.99977	.99969	.99936	.99908	.99875	.99846	.99743
.50	.00184	.00368	.00552	.00736	.00920	.01104	.01289	.01473	.01657	.01842
	.99997	.99987	.99982	.99971	.99960	.99930	.99895	.99863	.99841	.99809
.60	.00184	.00368	.00552	.00736	.00920	.01104	.01288	.01472	.01656	.01840
	.99996	.99985	.99986	.99975	.99965	.99935	.99894	.99862	.99842	.99809
.70	.00184	.00368	.00552	.00736	.00920	.01104	.01287	.01471	.01654	.01837
	.99996	.99985	.99980	.99969	.99959	.99929	.99888	.99859	.99838	.99802
.80	.00184	.00368	.00552	.00736	.00919	.01103	.01286	.01469	.01652	.01834
	.99995	.99985	.99980	.99969	.99954	.99918	.99873	.99850	.99823	.99792
.90	.00184	.00368	.00552	.00736	.00919	.01102	.01285	.01468	.01650	.01831
	.99994	.99977	.99968	.99948	.99926	.99906	.99867	.99849	.99825	.99795
1.00	.00184	.00368	.00552	.00735	.00919	.01101	.01284	.01466	.01647	.01826
	.99994	.99975	.99963	.99943	.99923	.99898	.99851	.99831	.99804	.99763

U/K+IV/K'

-1

U+IV=SN

(A+IB)

K=SIN 5

B	1/A± .10	1/A± .20	1/A± .30	1/A± .40	1/A± .50	1/A± .60	1/A± .70	1/A± .80	1/A± .90	1/A= 1.00
0.00	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.05941	.61256	.49541	.41256	.34610	.26638	.23490	.18171	.12242	.06000	.00000
.10	.96698	.91559	.97912	.97161	.96281	.95200	.93771	.91650	.87466	.79997
.05935	.61263	.49554	.41265	.34659	.26928	.23663	.18561	.13293	.08350	.00000
.20	.97400	.97120	.95829	.94335	.92597	.90494	.87804	.84132	.8695	.71956
.63918	.61277	.49593	.41364	.34806	.29194	.24151	.19492	.15267	.11896	.00000
.30	.96109	.95682	.93755	.91536	.88983	.85952	.82271	.77680	.72113	.65965
.05890	.61301	.49657	.41495	.35046	.29615	.24882	.20749	.17296	.14670	.00000
.40	.94629	.94249	.91695	.88776	.85666	.81657	.77233	.72164	.66640	.61071
.05852	.61334	.49746	.41675	.35370	.30156	.25779	.22129	.19225	.17048	.00000
.50	.93562	.92820	.89652	.86065	.82058	.77608	.72678	.67396	.62033	.56900
.05803	.61377	.49860	.41901	.35769	.30816	.26779	.23542	.21041	.19173	.00000
.60	.92311	.91397	.87630	.83412	.78805	.73824	.68562	.63218	.58047	.53260
.05747	.61429	.49997	.42171	.36233	.31548	.27836	.24947	.22753	.21117	.00000
.70	.91178	.89982	.85634	.80826	.75684	.72929	.64534	.59511	.54536	.50034
.05682	.61489	.50156	.42480	.36752	.32354	.28922	.26324	.24375	.22922	.00000
.80	.89865	.88574	.83666	.76312	.72711	.67021	.61445	.56191	.51405	.47144
.05611	.61559	.50338	.42825	.37315	.33158	.30018	.27667	.25918	.24613	.00000
.90	.88672	.87176	.81729	.75875	.69886	.63973	.58352	.53194	.48586	.44535
.05534	.61637	.50539	.43202	.37915	.34006	.31111	.28972	.27390	.26210	.00000
1.00	.87501	.85700	.79826	.73517	.67206	.61137	.55510	.50471	.46030	.42165
.05422	.61724	.50760	.43606	.38542	.34870	.30236	.28799	.27725	.26700	.00000

$U/K+IV/K'$
 $\frac{U}{K}$
 $U+IV=SN \quad (A+IB)$

$K = \sin 10$

B	$z/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
0.00	.36839 1.00000	1.00000 .62448	1.00000 .62850	1.00000 .51571	1.00000 .42967	1.00000 .35665	1.00000 .28932	1.00000 .22302	1.00000 .15060	1.00000 .00000
.10	.38833 .99776	.97405 .82422	.97564 .62870	.96942 .51601	.96117 .43025	.95066 .35774	.93655 .29191	.91544 .22033	.87759 .16349	.79865 .10255
.20	.39816 .99551	.94838 .82346	.95135 .62913	.93897 .51688	.92269 .43196	.90228 .36092	.87575 .29762	.83924 .23992	.78694 .18763	.71751 .14599
.30	.38789 .99328	.92321 .82225	.92717 .62957	.90861 .51832	.88493 .43478	.85564 .36595	.81930 .30667	.77373 .25522	.71827 .21240	.65691 .17988
.40	.38750 .99104	.89872 .82068	.90316 .63032	.87904 .52031	.84814 .43057	.81128 .37253	.76781 .31750	.71763 .27198	.66273 .23588	.60728 .20687
.50	.38699 .98882	.87502 .81885	.87938 .63128	.84980 .52280	.81256 .44322	.76950 .30032	.72117 .32954	.66902 .28909	.61586 .25793	.56490 .23471
.60	.38639 .98661	.85215 .81383	.85587 .63244	.82116 .52576	.77115 .4412	.73039 .38900	.67895 .34225	.62633 .30106	.57522 .27867	.52783 .25827
.70	.38567 .98442	.83013 .81472	.83268 .63378	.79323 .52915	.74559 .45464	.69389 .39832	.64063 .35526	.58837 .32265	.53935 .29825	.49490 .28009
.80	.38485 .98223	.80694 .81256	.80986 .63531	.76605 .53292	.71432 .46116	.65987 .40606	.60571 .36825	.55430 .33877	.50720 .31683	.46533 .30049
.90	.38392 .98007	.78854 .81042	.78743 .63700	.73968 .53702	.68457 .46807	.62818 .41306	.57376 .35136	.52346 .35439	.47834 .33449	.43858 .31968
1.00	.38293 .97793	.76889 .80832	.76544 .63866	.71415 .54141	.65629 .47528	.59863 .42820	.54463 .39421	.49538 .36949	.45204 .35134	.41423 .33784

$U/K + IV/K'$
 -1
 $U + IV = SN$ (A+IC)

K SYN 15

B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.00	.24665	.55680	1.00000	1.06000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
	1.00000	1.00000	.79089	.61948	.50845	.41807	.33666	.26091	.17520	.00000
.10	.24662	.55626	.96123	.96422	.95784	.94815	.93647	.91358	.87572	.79641
	.99848	.99104	.73029	.61968	.50904	.42007	.34122	.26698	.19008	.11895
.20	.24653	.55463	.92325	.92664	.91603	.89727	.87161	.83557	.78246	.71400
	.99696	.98216	.78058	.62026	.51078	.42355	.34768	.27933	.21787	.16908
.30	.24639	.55197	.88666	.89346	.87507	.84618	.81315	.76835	.71333	.65222
	.99544	.97343	.78603	.62122	.51360	.42905	.35783	.29677	.24627	.20604
.40	.24619	.54835	.85180	.85807	.83512	.80143	.75971	.71060	.65641	.60145
	.99393	.96494	.78295	.62254	.51739	.43620	.36996	.31576	.27307	.24120
.50	.24793	.54394	.81875	.82503	.79649	.75732	.71118	.66042	.60820	.55794
	.99242	.95674	.77961	.62422	.52204	.44463	.38338	.33510	.29811	.27062
.60	.24764	.53885	.78748	.79206	.75934	.71596	.66714	.61620	.56628	.51977
	.99094	.94586	.77625	.62622	.52741	.45397	.39746	.35415	.32153	.29732
.70	.24724	.53256	.75786	.76097	.72378	.67730	.62706	.57678	.52916	.48576
	.98942	.94134	.77300	.62854	.53336	.46394	.41180	.37267	.34355	.32192
.80	.24682	.52599	.72978	.72915	.68987	.64124	.59047	.54130	.49588	.45515
	.98793	.93420	.76998	.63114	.53977	.47430	.42613	.39057	.36430	.34480
.90	.24634	.51892	.70310	.69936	.65762	.60760	.55693	.50912	.46579	.42739
	.98645	.92745	.76724	.63399	.54652	.48488	.44030	.40780	.38394	.36622
1.00	.24560	.51144	.67771	.67072	.62702	.57622	.52608	.47976	.43838	.40207
	.98498	.92109	.76621	.63708	.55353	.49552	.45419	.42437	.40256	.38638

$$\begin{matrix} U/K+IV/K^* \\ -1 \\ U+IV=SN \quad (A+IB) \end{matrix}$$

K=SIN 20

B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.00	.18346	.30630	.67266	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
	1.00000	1.00000	.67266	.75402	.59637	.48445	.38895	.29807	.19950	.00000
.10	.18344	.36707	.66982	.94834	.95124	.93484	.93115	.91073	.87296	.79315
	.93677	.99413	.97728	.75302	.59673	.48562	.39149	.30381	.21625	.13485
.20	.18339	.36738	.66182	.89828	.90306	.88873	.86593	.82999	.77830	.70888
	.99755	.98828	.95574	.75028	.59779	.48903	.39864	.31846	.24738	.19127
.30	.18329	.38663	.64989	.85107	.85599	.83556	.80344	.76018	.71602	.64539
	.99632	.98249	.93612	.74645	.59954	.49440	.40924	.33761	.27098	.23481
.40	.18315	.38467	.63533	.80650	.81047	.78496	.74702	.70001	.64710	.59299
	.99510	.97677	.91868	.74218	.60192	.50134	.42207	.35035	.30858	.27160
.50	.18297	.38261	.61317	.76514	.76682	.73726	.69571	.64756	.59712	.54793
	.99388	.97114	.90333	.73797	.60489	.50944	.43614	.37924	.33601	.30400
.60	.18275	.36018	.60212	.72660	.72526	.69266	.64903	.60124	.55334	.50828
	.99267	.96563	.96563	.73413	.60838	.51636	.45077	.39965	.36144	.33319
.70	.18249	.37736	.58466	.69061	.68690	.65107	.60666	.55987	.51456	.47286
	.99146	.96026	.87814	.73084	.61233	.52779	.46552	.41932	.38515	.35987
.80	.18220	.37418	.56709	.65694	.64880	.51240	.56795	.52262	.47980	.44097
	.99026	.95503	.86786	.72817	.61666	.53752	.48013	.43815	.40732	.38450
.90	.18186	.37066	.54960	.62537	.61391	.57650	.53252	.48684	.44683	.41201
	.9906	.94998	.85880	.72613	.62133	.54737	.49443	.45612	.42612	.40739
1.0	.18149	.36684	.53234	.59573	.56118	.54317	.50000	.45804	.41969	.38566
	.98787	.94510	.85103	.72471	.62625	.55722	.50034	.47324	.44768	.42876

$$U + IV = SN \quad (A + IB)$$

K-SIN 25

	B	1/A= .10	1,ii= .20	1/A= .30	1/A= .40	1/A= .50	1/A= .60	1/A= .70	1/A= .80	1/A= .90	1/A= 1.00
0.00	•14511 1.00000	•30105 1.00000	•48684 1.00000	•78093 1.00000	•71394 .56048	1.00000 .56048	1.00000 .44425	1.00000 .33397	1.00000 .22514	1.00000 .09000	1.00000 .09000
.10	•14510 .99834	•30089 .99525	•48594 .99631	•76637 .94811	•93498 .70962	•93618 .56127	•92596 .44679	•90658 .34416	•66910 .24370	•76873 .15123	
.20	•14505 .99768	•30043 .99052	•46330 .97282	•73616 .90854	•87261 .70620	•87380 .56357	•85486 .45368	•82190 .35388	•77123 .27797	•70194 .21362	
.30	•14497 .99668?	•29966 .98582	•47900 .95973	•70290 .87913	•81446 .70178	•81146 .56722	•78062 .46431	•74846 .36022	•69590 .31238	•63617 .26163	
.40	•14487 .99577	•29859 .98117	•47321 .94720	•67042 .85643	•76096 .69740	•75783 .57198	•72804 .47677	•68501 .40195	•63434 .34421	•50165 .30159	
.50	•14473 .99471	•29723 .97659	•46611 .93534	•63864 .83842	•71192 .69366	•70547 .57764	•67309 .49026	•62964 .42355	•58190 .37334	•53465 .33639	
.60	•14456 .99356	•29559 .97209	•45792 .92425	•60864 .82389	•66697 .69037	•65712 .58396	•62339 .50411	•58076 .44437	•53611 .40004	•49324 .36741	
.70	•14436 .99262	•29368 .96766	•44884 .91396	•58011 .81209	•62570 .68909	•61267 .54076	•57842 .51791	•53726 .46417	•49553 .42462	•45623 .39546	
.80	•14414 .99158	•29151 .96334	•43906 .90449	•55301 .80248	•58775 .68830	•57191 .59791	•53766 .53146	•49821 .43291	•45919 .44735	•42302 .42109	
.90	•14389 .99054	•28910 .95913	•42874 .89555	•52728 .79470	•55276 .66841	•53456 .60528	•50065 .51462	•46297 .50060	•42642 .46846	•39291 .44466	
1.00	•14359 .98951	•28647 .95505	•41805 .88800	•50287 .76844	•52050 .68930	•50032 .61279	•46697 .55734	•43103 .51331	•39673 .48813	•36555 .46652	

U/K+IV/V/K'
-1
U+IV=SN (A+IB)

K=SIN 30

B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.03
0.00	.11965	.24581	.38006	.56807	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
	1.00000	1.00000	1.00000	1.00000	.65046	.50937	.38306	.25341	.00000	
.10	.11964	.24569	.36750	.56536	.84299	.92028	.91757	.90057	.86386	.78294
	.99905	.99587	.98908	.97323	.88357	.65720	.51142	.38946	.27375	.16874
.20	.11960	.24534	.36584	.55760	.77311	.84465	.83874	.81031	.76141	.69286
	.99810	.99175	.97828	.94766	.84033	.65417	.51711	.40562	.31068	.23752
.30	.11951	.24475	.36312	.54572	.71699	.77537	.76594	.73197	.68236	.62418
	.98766	.99715	.96770	.92417	.81085	.65088	.52540	.42613	.34752	.26925
.40	.11945	.24394	.37941	.53080	.66823	.71295	.70014	.66441	.61754	.56711
	.99620	.98361	.95743	.90320	.78921	.64844	.53527	.44762	.38080	.33182
.50	.11934	.24290	.37478	.51389	.62453	.65701	.64130	.60575	.56239	.51790
	.99526	.97961	.94758	.88487	.77294	.64734	.54593	.46856	.41070	.36632
.60	.11920	.24165	.36934	.49578	.58479	.60690	.58886	.55436	.51443	.47465
	.99431	.97567	.93813	.86905	.76068	.64765	.55692	.48841	.43765	.40038
.70	.11904	.24018	.36319	.47703	.54839	.56192	.54212	.50898	.47216	.43622
	.99338	.97179	.92934	.85553	.75155	.64923	.56794	.50704	.46211	.42900
.80	.11885	.23852	.35643	.45822	.51490	.52144	.50336	.46866	.43458	.40162
	.99244	.96801	.92104	.84409	.74489	.65188	.57887	.52450	.48446	.45404
.90	.11865	.23667	.34917	.423450	.48400	.48489	.46293	.43264	.40096	.37088
	.99151	.96431	.91332	.83447	.74022	.65537	.58962	.54088	.50500	.47839
1.00	.11841	.23463	.34150	.42113	.45544	.45178	.42927	.40031	.37074	.34297
	.99059	.96071	.90619	.82644	.73716	.65957	.6014	.55628	.52400	.50000

$U/K+IV/K^*$
 $^{+1}_{-1}$
 $U+IV=SN \quad (A+IB)$

$K=\sin 35$

B	$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
0.00	.10139 1.00000	.20715 1.00000	.32311 1.00000	.45976 1.00000	.64588 1.00000	.1.00000 ,81717	.1.00000 .59198	.1.00000 .43645	.1.00000 .28576	.1.00000 .00000
.10	.10138 .99913	.0705 .9627	.32270 .9053	.45823 .97922	.63806 .95077	.86977 .79403	.90246 .59181	.89162 .44255	.85675 .30776	.77550 .18600
.20	.10135 .99825	.20677 .99255	.32147 .98114	.45374 .95900	.61781 .90764	.77789 .82629	.84159 .59189	.79347 .45761	.74636 .34717	.68120 .26296
.30	.10130 .99738	.20630 .98865	.31944 .97192	.446660 .93980	.59080 .87258	.70579 .73568	.73071 .59323	.70891 .47624	.66455 .38502	.60899 .31809
.40	.10122 .99651	.20564 .98519	.31666 .96293	.43721 .92199	.56110 .84489	.64504 .72157	.66024 .59621	.63687 .49527	.59607 .41848	.54904 .36246
.50	.10113 .99564	.20479 .98156	.31318 .95425	.42604 .90577	.53089 .82321	.59224 .70902	.59913 .60072	.57526 .51352	.53324 .44783	.49759 .39574
.60	.10102 .99477	.20377 .97799	.30925 .94593	.41355 .89125	.50123 .80634	.54504 .70219	.54600 .60643	.52212 .53067	.48848 .47381	.45272 .43192
.70	.10088 .99391	.20258 .97448	.30435 .93801	.40015 .87842	.47284 .79332	.50416 .69767	.49953 .61304	.47592 .54676	.44511 .49707	.41319 .46024
.80	.10073 .96305	.20123 .97104	.29915 .33054	.38620 .86723	.44581 .76337	.46699 .69553	.45863 .62026	.43542 .56187	.40698 .51813	.37814 .48552
.90	.10055 .99220	.19972 .96768	.29352 .92353	.37197 .85756	.42030 .77592	.43353 .69519	.42240 .62764	.39968 .57614	.37325 .53738	.34693 .50837
1.00	.10035 .99135	.19806 .96441	.28753 .91700	.35769 .81930	.39633 .77048	.40329 .69624	.37013 .63574	.36796 .58965	.34324 .55513	.31903 .52921

$U/K + IV/K$
 -1
 $U+IV=SN$ (A+IB)

K=SIN 40

		1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.00	0.0000	.08757	.17830	.27615	.38745	.52534	.73569	.100000	.100000	.100000	.100000
	1.0000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	.71161	.90314	.32417	.00000
.10	.08756	.17822	.27502	.38636	.52154	.71059	.86801	.87742	.84696	.76598	.20966
	.99918	.99655	.99144	.98214	.96349	.90056	.69877	.50730	.34739		
.20	.08754	.17790	.27484	.38314	.51080	.66245	.76277	.76826	.73082	.66638	.29059
	.99837	.99311	.98294	.96465	.92326	.84603	.67848	.51747	.38776		
.30	.08749	.17758	.27321	.37795	.49475	.61260	.67779	.67702	.64149	.59011	.34823
	.99755	.98969	.97458	.94787	.89891	.80446	.66321	.53011	.42496		
.40	.08743	.17702	.27098	.37103	.47523	.56565	.60768	.60146	.56944	.52722	.39326
	.99673	.98629	.96642	.93207	.87298	.77601	.65412	.54333	.45669		
.50	.08735	.17531	.26817	.36265	.45378	.52249	.54659	.53853	.50961	.47387	
	.99592	.98294	.95851	.91745	.85144	.75634	.64990	.55648	.46386	.43019	
.60	.08725	.17545	.26483	.35311	.43156	.48317	.49804	.48537	.45095	.42793	.46149
	.99511	.97963	.95091	.90413	.83389	.74287	.64916	.56935	.50757		
.70	.08713	.17445	.26102	.34270	.40931	.44745	.45427	.43969	.41547	.38797	
	.99430	.97638	.94364	.89217	.81981	.73189	.65067	.58189	.52668	.48670	
.80	.08700	.17331	.25678	.33168	.38754	.41602	.41600	.40054	.37774	.35297	
	.99350	.97319	.93675	.80155	.80868	.72825	.65429	.59408	.54778	.51281	
.90	.08685	.17204	.25217	.32028	.36655	.38850	.38228	.36617	.34472	.32213	
	.99273	.97007	.93026	.87223	.80004	.72511	.65091	.60592	.56529	.53450	
1.00	.08668	.17064	.24724	.30069	.34650	.35235	.33590	.31563	.29482		
	.99191	.96703	.92419	.86415	.79347	.72386	.66436	.61739	.58150	.55423	

$U/K^2IV/K^2$
 -1
 $U+IV = SN \quad (A+IB)$

K=SIN 45

B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.00	.07666	.15572	.24011	.33412	.44551	.59311	.89213	1.00000	1.00000	1.00000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.07665	.15566	.23984	.33327	.44295	.58357	.77530	.85239	.83307	.75375
	.99923	.99675	.99206	.98390	.96911	.93702	.82463	.56933	.39478	.23443
.20	.07663	.15545	.23901	.33073	.43555	.55911	.68365	.73027	.70713	.64769
	.99845	.99352	.98419	.96810	.93963	.88322	.75900	.58483	.433317	.32068
.30	.07659	.15511	.23766	.32663	.42411	.52714	.60980	.63467	.61226	.56708
	.99768	.99030	.97643	.95286	.91267	.84141	.72331	.58478	.46657	.37938
.40	.07654	.15463	.23579	.32111	.40967	.49286	.54787	.55892	.53772	.50168
	.99691	.98711	.96884	.93040	.80888	.81027	.70186	.58863	.49411	.42358
.50	.07646	.15402	.23343	.31438	.39324	.45695	.49509	.49740	.47727	.44719
	.99614	.96395	.96148	.92492	.86847	.78755	.68959	.59498	.51745	.45893
.60	.07638	.15328	.23063	.30666	.37569	.42669	.44960	.46630	.42705	.40104
	.99537	.96084	.95438	.91252	.85135	.77126	.68324	.60264	.53790	.48846
.70	.07626	.15242	.22742	.29614	.35770	.39657	.41004	.40307	.38457	.36148
	.99461	.97778	.94759	.90128	.83727	.75985	.68085	.61159	.55629	.51396
.80	.07616	.15143	.22385	.28906	.33974	.36872	.37534	.36594	.34814	.32724
	.99385	.97477	.94113	.89120	.82587	.75213	.68144	.62085	.57315	.53651
.90	.07602	.15034	.21995	.27958	.32215	.34312	.34471	.33370	.31655	.29738
	.99309	.97163	.93503	.88227	.81681	.74723	.68332	.63036	.58879	.55680
1.00	.07588	.14913	.21578	.26987	.30515	.31963	.31749	.30544	.28891	.27115
	.99234	.96896	.92931	.87445	.80975	.74450	.68681	.63996	.60343	.57532

$U/K+IV/K$
 $U+IV := SN^{-1} (A+IR)$

K=SIN 50

B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.00	.06775	.13740	.21122	.29236	.38609	.50314	.67599	.80000	.99999	1.00000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.06774	.13734	.21098	.29166	.38413	.49722	.64880	.80182	.91246	.73793
	.99926	.99691	.99252	.98509	.97235	.94808	.88765	.69164	.45258	.26311
.20	.06772	.13716	.21028	.28957	.37843	.48104	.59519	.67530	.67533	.62428
	.99852	.99383	.98509	.97042	.94575	.90130	.81222	.65302	.48276	.35314
.30	.06769	.13646	.20911	.26617	.36951	.45814	.53977	.59332	.57659	.53566
	.99778	.99077	.97777	.95624	.92110	.86241	.76563	.63465	.50795	.41075
.40	.06764	.13644	.20751	.26858	.35804	.43190	.48896	.51203	.50177	.47277
	.99704	.98773	.97061	.94275	.89698	.83376	.73690	.62778	.52895	.45245
.50	.06758	.13591	.20549	.27596	.34476	.40470	.44381	.45466	.44254	.41827
	.99631	.98472	.96365	.93009	.87966	.80841	.71940	.62728	.54736	.48515
.60	.06750	.13527	.20309	.26948	.33034	.37796	.40404	.40722	.39414	.37292
	.99557	.98176	.95693	.91939	.86317	.79106	.70920	.63044	.56410	.51232
.70	.06741	.13451	.20033	.26230	.31533	.35242	.36899	.36720	.35365	.33456
	.99484	.97884	.95049	.90771	.84937	.77847	.70386	.63580	.57367	.53579
.80	.06731	.13365	.19725	.25459	.30017	.32845	.33801	.33291	.31919	.30171
	.99411	.97598	.94436	.09806	.83804	.76962	.70192	.64252	.59431	.55664
.90	.06719	.13270	.19389	.24650	.28516	.30815	.31051	.30318	.28950	.27326
	.99339	.97318	.93856	.88950	.82889	.76361	.70229	.65006	.60620	.57512
1.00	.06706	.13164	.19026	.23819	.27053	.28552	.28600	.27716	.26364	.24848
	.99267	.97044	.93310	.86194	.82164	.76002	.70433	.65809	.62142	.59284

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 55

B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.00	.06025	.12205	.18722	.25821	.33889	.43645	.56620	.61717	.60000	.60000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	.51795	.00000
.10	.06024	.12200	.18701	.25761	.33730	.43210	.55354	.71113	.78021	.71721
	.99929	.99703	.99206	.98593	.97445	.95406	.91113	.78578	.52294	.29649
.20	.06022	.12164	.18640	.25584	.33267	.41997	.51656	.60816	.63404	.59537
	.99857	.99407	.98577	.97209	.94979	.91177	.84136	.70948	.53375	.36726
.30	.06019	.12157	.18539	.25295	.32535	.40219	.47676	.52806	.53547	.50801
	.99786	.99113	.97876	.95867	.92675	.87549	.79320	.67493	.54636	.44112
.40	.06015	.12121	.18399	.24904	.31586	.38111	.43539	.46446	.46316	.44118
	.99715	.98821	.97193	.94587	.90587	.84596	.76149	.65914	.55955	.47884
.50	.06009	.12074	.18224	.24423	.30475	.35865	.39711	.41270	.40689	.36795
	.99644	.98532	.96528	.93383	.88745	.82281	.74118	.65306	.57281	.50824
.60	.06003	.12017	.18014	.23867	.29257	.33608	.36260	.36966	.36135	.34434
	.99573	.98247	.95885	.92266	.87154	.80516	.72863	.65245	.58593	.53278
.70	.05995	.11950	.17773	.23246	.27977	.31419	.33175	.33324	.32349	.30784
	.99503	.97967	.95268	.91243	.85810	.79206	.72140	.65510	.58895	.55420
.80	.05986	.11875	.17504	.22582	.26674	.29338	.30423	.30198	.29143	.27663
	.99433	.97692	.94680	.90317	.84693	.78261	.71789	.65979	.61164	.57342
.90	.05975	.11790	.17210	.21882	.25374	.27385	.27966	.27406	.26389	.25014
	.99363	.97422	.94123	.89488	.83782	.77607	.700	.66576	.62400	.59099
1.00	.05964	.11697	.16895	.21158	.24100	.25567	.25766	.25111	.23997	.22697
	.99293	.97159	.93599	.88754	.83053	.77182	.71798	.67255	.63601	.50723

$U/K + IV/K'$
 η_{-1}
 $U + IV = SN \quad (A + IB)$

K=SIN 60

B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.00	.05375	.10860	.16664	.22926	.29964	.38306	.49082	.65846	.1.00000	.1.00000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	.65399	.00000
.10	.05375	.10876	.16646	.22874	.29830	.37962	.48072	.61411	.72918	.68979
	.99931	.99713	.99312	.98655	.97592	.95776	.92262	.83662	.60231	.33497
.20	.05373	.10862	.16593	.22726	.29441	.36990	.45499	.56030	.50421	.56054
	.99161	.99426	.98629	.97331	.95260	.92651	.85861	.74861	.58091	.42151
.30	.05371	.10836	.16504	.22670	.28623	.35541	.42204	.47394	.49096	.47273
	.99792	.99141	.97955	.96047	.93073	.88423	.81137	.70481	.57942	.46906
.40	.05367	.10806	.16381	.22132	.28017	.33791	.38781	.41869	.42354	.40773
	.99723	.98659	.97295	.94819	.91079	.85578	.77676	.68307	.58502	.50193
.50	.05362	.10764	.16227	.21715	.27068	.31094	.35516	.37280	.37139	.35694
	.99654	.98579	.98553	.96653	.93662	.89307	.83305	.75707	.67302	.59367
.60	.05356	.10713	.16042	.21231	.26021	.29960	.32516	.33425	.32935	.31581
	.99586	.98303	.96032	.92585	.87766	.81543	.74315	.66962	.60375	.54985
.70	.05349	.10655	.15830	.20692	.24914	.28063	.29801	.30143	.29448	.28165
	.99517	.98031	.95436	.91597	.86454	.80212	.73470	.67024	.61453	.56938
.80	.05341	.10567	.15593	.20110	.23779	.26243	.27359	.27317	.26500	.25276
	.99449	.97765	.94868	.90700	.85356	.79237	.73014	.67339	.62559	.58745
.90	.05331	.10512	.15334	.19496	.22643	.24525	.25167	.24455	.23971	.22801
	.99381	.97504	.94328	.89894	.84454	.78547	.72837	.67816	.63671	.60358
1.00	.05321	.10430	.15056	.18861	.21524	.22917	.23197	.22705	.21777	.20658
	.99314	.97249	.93820	.89179	.83726	.78086	.72661	.68399	.64772	.61690

$U/K+IV/K^*$
 $U+IV=SN$ $(A+IB)$

K=SIN 65

B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.00	.04797	.09703	.14845	.20385	.26567	.33797	.42097	.56048	.66027	.1.00051
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	.00000
.10	.04796	.09699	.14829	.20340	.26453	.33514	.42124	.53295	.65832	.65349
	.99932	.99720	.99332	.98701	.97696	.96028	.92971	.86203	.67404	.37773
.20	.04795	.09687	.14782	.20206	.26119	.32707	.40098	.47796	.52945	.52000
	.99865	.99441	.98665	.97422	.95463	.92310	.86958	.77409	.61965	.45370
.30	.04792	.09666	.14703	.19983	.25589	.31493	.37405	.42317	.44521	.43463
	.99797	.99163	.98013	.96181	.93361	.89031	.82370	.72617	.60594	.49334
.40	.04789	.09637	.14595	.19692	.24695	.30009	.34523	.37555	.38400	.37310
	.99730	.98886	.97372	.94992	.91438	.86275	.79102	.70087	.60531	.52124
.50	.04785	.09600	.14459	.19326	.24074	.28362	.31716	.33518	.33658	.32566
	.99663	.98615	.96746	.93871	.89720	.84046	.76868	.68016	.61021	.54351
.60	.04779	.09555	.14296	.18904	.23163	.26708	.29099	.30089	.29831	.26752
	.99596	.98346	.96145	.92826	.86220	.82298	.75397	.66281	.61783	.56369
.70	.04773	.09503	.14106	.18431	.22198	.25052	.26709	.27152	.28657	.25599
	.99529	.98081	.95565	.91864	.86935	.80962	.74475	.66195	.62686	.58161
.80	.04766	.09443	.13699	.17919	.21204	.23455	.24544	.24612	.23973	.22942
	.99462	.97821	.95011	.90930	.85854	.79971	.73950	.68397	.63663	.59816
.90	.04758	.09376	.13670	.17379	.20206	.21939	.22592	.22399	.21672	.20671
	.99396	.97567	.94486	.90203	.84962	.79260	.73711	.68784	.64676	.61364
1.00	.04748	.09303	.13424	.16820	.19219	.20514	.20456	.20832	.19677	.16709
	.99330	.97316	.93991	.89503	.84236	.78776	.73682	.69295	.65699	.62822

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 70

B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.00	.04264	.06622	.13180	.18076	.23508	.29807	.37605	.48445	.68787	1.00000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	.00000
.10	.04264	.06618	.13166	.18036	.23410	.29568	.36982	.46449	.58022	.60649
	.99934	.99726	.99347	.98736	.97772	.96200	.93410	.87664	.72336	.42162
.20	.04262	.06607	.13124	.17919	.23122	.28886	.35324	.42137	.47333	.47452
	.99867	.99452	.98698	.97490	.95609	.92629	.87685	.79071	.64855	.6159
.30	.04260	.06589	.13055	.17728	.22663	.27852	.33073	.37568	.39938	.39434
	.99801	.99180	.98058	.96280	.93570	.89459	.83222	.74119	.62609	.51328
.40	.04257	.06563	.12960	.17469	.22061	.26580	.30619	.33468	.34484	.33755
	.99735	.98910	.98741	.95121	.91699	.86774	.79974	.75385	.62083	.53668
.50	.04253	.06530	.12839	.17149	.21348	.25175	.28194	.29933	.30234	.29410
	.99669	.98643	.98620	.94026	.90023	.84584	.77713	.69943	.62292	.55661
.60	.04249	.06491	.12696	.16778	.20554	.23720	.25911	.26903	.26794	.25930
	.99603	.98379	.98230	.93005	.88554	.82651	.76196	.69273	.62866	.57456
.70	.04243	.06444	.12530	.16362	.19709	.22273	.23810	.24292	.23938	.23062
	.99538	.98120	.95662	.92064	.87291	.81517	.75225	.69084	.63637	.59117
.80	.04237	.06391	.12345	.15913	.18838	.20871	.21898	.22028	.21521	.20644
	.99472	.97865	.95120	.91207	.86225	.80519	.74653	.69203	.64515	.60676
.90	.04229	.06332	.12143	.15437	.17961	.19535	.20167	.20050	.19443	.18590
	.99907	.97615	.94606	.90435	.85342	.79795	.74373	.69525	.65452	.62149
1.00	.04221	.06267	.11926	.14944	.17092	.18275	.18602	.18311	.17651	.16813
	.99343	.97371	.94120	.8947	.84623	.79296	.74306	.69982	.66416	.63547

$$U/K + IV/K' \stackrel{-1}{\longrightarrow} U + IV = SN \quad (A+IB)$$

K-SIN 75

β	$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$
.00	.03753 1.00000	.07586 1.00000	.11590 1.00000	.15880 1.00000	.20624 1.00000	.26091 1.00000	.32767 1.00000	.41867 1.00000	.57591 1.00000
.10	.03753 .99935	.07587 .99358	.11578 .98761	.15846 .98761	.20539 .97825	.25808 .96314	.32273 .93697	.40334 .86442	.50436 .75302
.20	.03752 .99869	.07573 .99460	.11541 .98720	.15744 .97539	.20291 .95713	.25308 .92851	.30892 .88172	.36643 .80158	.41705 .66870
.30	.03750 .99804	.07557 .99192	.11480 .98090	.15578 .96352	.19895 .93719	.24425 .89759	.28994 .83615	.33008 .75153	.35326 .64064
.40	.03747 .99739	.07534 .98926	.11397 .97474	.15352 .95215	.19374 .91886	.23333 .87126	.26898 .80584	.29450 .72304	.30545 .63219
.50	.03744 .99674	.07506 .98663	.11292 .96873	.15074 .94139	.18756 .90240	.22121 .84966	.24809 .78313	.26419 .70754	.26795 .63228
.60	.03739 .99609	.07471 .98603	.11166 .96292	.14750 .93135	.18067 .88794	.20861 .83248	.22827 .76770	.23750 .69995	.23053 .63667
.70	.03734 .99544	.07430 .96148	.11021 .95734	.14387 .92210	.17332 .87548	.19603 .81917	.20994 .75769	.21474 .6933	.21217 .64341
.80	.03729 .99480	.07384 .97897	.10859 .95200	.13995 .91366	.16573 .86494	.10380 .80915	.19320 .75166	.13478 .69795	.19072 .65148
.90	.03722 .99416	.07332 .97651	.10682 .94694	.13579 .90605	.15807 .85618	.17212 .80185	.17800 .74857	.17731 .73071	.17231 .66029
1.00	.03715 .99352	.07275 .97411	.10492 .94215	.13148 .89926	.15047 .84903	.16109 .79677	.16424 .74764	.16194 .70490	.15635 .66948

$U/K+IV/K'$
 $^{-1}$
 $U+IV=SN$ (A+IB)

K=SIN 80

		1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.00	.03231	.06530	.09972	.13655	.17718	.222302	.28056	.35665	.48273	.60000	.80000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.03231	.06527	.09961	.13626	.17646	.22211	.27631	.34422	.42995	.47875	.49146
	.99935	.99733	.99365	.98777	.97861	.96396	.93879	.88945	.77012	.68178	.51937
.20	.03230	.06516	.09930	.13539	.17435	.21722	.26483	.31573	.35887	.36912	
	.99670	.99466	.98735	.97572	.95783	.92996	.88485	.80843	.68178	.51937	
.30	.03228	.06505	.09878	.13397	.17098	.20577	.24693	.28375	.30493	.30541	
	.99806	.99201	.98113	.96401	.93819	.89956	.84186	.75828	.65041	.53905	
.40	.03226	.06485	.09807	.13204	.16655	.20052	.23126	.25401	.26399	.26083	
	.99741	.98938	.97503	.95278	.92011	.87360	.80988	.72916	.63991	.55647	
.50	.03223	.06460	.09716	.12966	.16128	.19023	.21353	.22783	.23169	.22689	
	.99677	.98677	.96909	.94216	.90386	.85222	.78714	.71300	.63868	.57279	
.60	.03219	.06430	.09606	.12688	.15540	.17950	.19663	.20511	.20540	.19979	
	.99613	.98420	.96335	.93224	.88957	.83514	.77157	.70484	.64215	.58635	
.70	.03215	.06395	.09484	.12378	.14912	.16876	.18095	.18539	.18350	.17750	
	.99549	.98167	.95783	.92309	.87723	.82187	.76137	.70177	.64825	.60329	
.80	.03210	.06356	.09345	.12042	.14263	.15830	.16659	.16820	.16494	.15878	
	.99485	.97519	.95255	.91474	.86677	.81184	.75515	.70201	.65584	.61764	
.90	.03205	.06311	.09193	.11686	.13607	.14829	.15353	.15344	.14900	.14282	
	.99422	.97676	.94754	.90720	.85806	.80450	.75167	.70445	.66427	.63142	
1.00	.03199	.06262	.09030	.11316	.12956	.13682	.14168	.13986	.13510	.12506	
	.99356	.97438	.94281	.90048	.85094	.79936	.75070	.70839	.67316	.64465	

U/K+IV/K'

卷之三

K=SIN 85

S		1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90
0.00	.02629	.05311	.08110	.11101	.14396	.18171	.22746	.28838	.38734	.1.00000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	.00000
.10	.02628	.05309	.08101	.11077	.14338	.18034	.22408	.27866	.34767	.39191
	.99336	.99336	.99337	.98787	.97881	.96440	.93981	.89216	.77503	.50981
.20	.02627	.05302	.08076	.11007	.14166	.17641	.21492	.25616	.29175	.30160
	.99671	.99469	.98743	.97591	.95823	.93079	.88661	.81223	.68912	.52866
.30	.02626	.05291	.08034	.10892	.13896	.17011	.20219	.23062	.24838	.24960
	.99807	.99206	.98126	.96429	.93876	.90069	.84402	.76210	.65601	.54532
.40	.02624	.05275	.07975	.10736	.13536	.16296	.18798	.20668	.21520	.21310
	.99743	.96944	.97520	.95315	.92084	.d7494	.81218	.73267	.64438	.56126
.50	.02622	.05255	.07902	.10543	.13112	.15466	.17368	.18551	.18894	.18532
	.99679	.98685	.96930	.94260	.90471	.85369	.78944	.71616	.64241	.57669
.60	.02619	.05231	.07814	.10318	.12636	.14598	.16001	.16708	.16753	.16315
	.99615	.98430	.96360	.93275	.89050	.83668	.77360	.70769	.64537	.59168
.70	.02616	.05202	.07714	.10066	.12127	.13729	.14730	.15106	.14967	.14492
	.99551	.98179	.95841	.92366	.87824	.82344	.76350	.70435	.65109	.60620
.80	.02612	.05170	.07601	.09794	.11601	.12800	.13564	.13707	.13453	.12960
	.99488	.97932	.95287	.91536	.86783	.81340	.75717	.70437	.65839	.62025
.90	.02607	.05134	.07477	.09505	.11069	.12068	.12503	.12480	.12152	.11655
	.99425	.97690	.94789	.90787	.85915	.80604	.75380	.70564	.66660	.53381
1.00	.02602	.05094	.07345	.09265	.10541	.11299	.11540	.11399	.11024	.10531
	.99362	.97454	.94319	.90119	.85205	.80087	.75261	.71043	.67532	.64685

$U/K + IV/K$
 -1
 $U + IV = SN \quad (A + IB)$

$K = \sin 66$

B	$1/A = .10$	$1/k = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
0.00	.02482	.05015	.07657	.10480	.13591	.17152	.21468	.27208	.36515	.40000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
.10	.02482	.05013	.07648	.10458	.13536	.17023	.21149	.26295	.32802	.37026
	.99936	.99935	.99370	.98788	.97884	.96445	.93992	.89247	.78004	.51201
.20	.02481	.05006	.07624	.10392	.13375	.16653	.20286	.24178	.27543	.28511
	.99871	.99470	.98745	.97594	.95827	.93089	.88681	.84267	.66997	.52976
.30	.02480	.04995	.07585	.10263	.13118	.16087	.19087	.21772	.25455	.23578
	.99807	.99236	.98127	.96432	.93883	.90083	.84428	.76255	.65667	.54607
.40	.02478	.04981	.07530	.10136	.12761	.15384	.17747	.19514	.20323	.20130
	.99743	.98945	.97522	.95319	.92192	.87509	.81245	.73308	.64491	.56182
.50	.02476	.04962	.07461	.09953	.12376	.14601	.16397	.17517	.17844	.17505
	.99679	.98636	.96933	.94266	.90481	.85386	.76971	.71653	.64285	.57716
.60	.02473	.04939	.07378	.09741	.11929	.13782	.15108	.15777	.15822	.15611
	.99615	.90434	.96363	.93282	.89052	.83686	.77406	.70802	.64575	.59207
.70	.02469	.04912	.07283	.09504	.11450	.13962	.15906	.14265	.14136	.13664
	.99552	.98180	.95815	.92373	.87836	.82362	.76375	.70465	.65142	.60555
.80	.02466	.04881	.07176	.09246	.10953	.12162	.12808	.12944	.12706	.12241
	.99488	.97933	.95291	.91544	.86795	.81359	.75741	.70465	.65869	.62057
.90	.02462	.04847	.07060	.08974	.10451	.11395	.11806	.11786	.11477	.11009
	.99425	.97692	.94793	.90795	.85928	.80622	.75403	.70690	.66688	.63409
1.00	.02457	.04809	.06934	.08691	.09952	.10669	.10897	.10765	.10412	.09946
	.99363	.97456	.94323	.90127	.85218	.80105	.75283	.71067	.67558	.64712

$$U + IV = SH \quad (A \leftarrow IB)$$

X=SIN 87

9	1/A= .10	1/A= .20	1/A= .30	1/A= .40	1/A= .50	1/A= .60	1/A= .70	1/A= .80	1/A= .90	1/A= 1.00				
0.00	.02316	.04679	.07144	.09779	.12630	.16002	.20026	.25374	.34031	.40000				
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000				
.10	.02316	.04677	.07137	.09752	.12629	.15881	.19729	.24525	.30591	.34565				
	.99936	.99735	.99371	.98789	.97866	.96449	.94002	.89271	.76082	.51371				
.20	.02315	.04671	.07114	.09696	.12479	.15536	.18925	.22555	.25690	.26615				
	.99871	.99476	.93745	.97595	.95831	.93096	.88697	.81301	.69063	.53062				
.30	.02314	.04661	.07077	.09595	.12240	.15009	.17807	.20314	.21888	.22010				
	.99807	.99207	.98128	.96435	.93886	.90093	.84447	.76289	.65718	.54565				
.40	.02312	.04647	.07026	.09457	.11925	.14354	.16559	.18209	.18967	.18790				
	.99743	.98946	.97524	.95323	.92099	.87522	.81266	.73346	.64532	.56227				
.50	.02310	.04630	.06961	.09287	.11550	.13623	.15300	.16346	.16654	.16340				
	.99679	.98687	.96935	.94270	.90469	.85399	.78992	.71682	.64319	.57752				
.60	.02307	.04608	.06884	.09089	.11131	.12860	.14097	.14724	.14767	.14385				
	.99615	.98432	.96365	.93286	.89670	.83700	.77427	.70626	.64605	.59238				
.70	.02304	.04583	.06795	.08868	.10684	.12095	.12978	.13312	.13193	.12777				
	.99552	.98181	.95817	.92378	.87845	.82377	.76395	.70489	.65169	.60682				
.80	.02301	.04555	.06696	.08628	.10220	.11348	.11952	.12080	.11859	.11426				
	.99489	.97934	.95294	.91550	.86805	.81373	.75760	.70487	.65893	.62081				
.90	.02297	.04523	.06587	.08375	.09752	.10633	.11017	.10999	.10712	.10275				
	.99426	.97893	.94796	.90802	.85938	.80637	.75420	.70711	.66710	.63432				
1.00	.02292	.04487	.06470	.08109	.09287	.09956	.10169	.10046	.9717	.9283				
	.99362	.97457	.94327	.90133	.85229	.80119	.75300	.71086	.67578	.64732				

$U/K+IV/K'$
 -1
 $J+IV=SN \quad (A+IB)$

K=SIN 66

B	1/A = .10	1/A = .20	= .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.0 0	.02117	.04277	.06530	.08938	.11590	.14525	.18301	.23186	.31082	.40000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	.00000
.1 0	.02117	.04275	.06523	.08863	.11543	.14515	.18030	.22412	.27952	.31607
	.99936	.99735	.99371	.98790	.97687	.96452	.94008	.89288	.76137	.51493
.2 0	.02116	.04270	.06503	.08846	.11406	.14200	.17297	.20614	.23490	.26336
	.99871	.99670	.98746	.97597	.95834	.93101	.80708	.61325	.69111	.53324
.3 0	.02115	.04261	.06469	.08770	.11188	.13719	.16276	.18567	.20009	.20125
	.99807	.99207	.98129	.96437	.93692	.90108	.84461	.76314	.65755	.54706
.4 0	.02113	.04218	.06422	.08644	.10900	.13120	.15135	.16645	.17340	.17161
	.99743	.98946	.97525	.95325	.92104	.87530	.81281	.73363	.64562	.56256
.5 0	.02111	.04232	.06363	.08489	.10557	.12453	.13986	.16943	.19226	.19461
	.99679	.98688	.96936	.94273	.90494	.85409	.79607	.71702	.64343	.57777
.6 0	.02109	.04212	.06293	.08308	.10175	.11755	.12087	.13460	.13501	.13153
	.99616	.98433	.96367	.93290	.89076	.83710	.77441	.70847	.64626	.59260
.7 0	.02106	.04189	.06212	.08106	.09766	.11056	.11864	.12170	.12062	.11662
	.99552	.98182	.95619	.92382	.87871	.82387	.76409	.70506	.65187	.60701
.8 0	.02103	.04163	.06121	.07086	.09342	.10374	.10926	.11044	.10842	.10447
	.99489	.97935	.95296	.91554	.86812	.81383	.75773	.70503	.65909	.62096
.9 0	.02100	.04134	.06021	.07654	.08914	.09721	.10072	.10056	.09793	.09394
	.99426	.97594	.94799	.90806	.85945	.80647	.75433	.70725	.66725	.63447
1.0 0	.02096	.04102	.05915	.07412	.08489	.09104	.09296	.09185	.08864	.08628
	.99363	.97458	.94329	.90138	.85236	.80129	.75312	.71100	.67592	.64747

$U/K + IV/K$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 69

B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
0.00	.01046 2.00000	.03731 1.00000	.05596 1.00000	.07796 1.00000	.10109 1.00000	.12756 1.00000	.15961 1.00000	.20219 1.00000	.27097 1.00000	.40000 .00000
.10	.01046 .99936	.03729 .99371	.05590 .98790	.07700 .97888	.10063 .95453	.12660 .94012	.15725 .89298	.19545 .89298	.24375 .78170	.27574 .51566
.20	.01046 .99971	.03724 .99470	.05572 .98746	.07730 .97597	.09949 .95835	.12385 .93104	.15086 .88715	.17978 .81340	.20468 .69139	.22231 .53160
.30	.01045 .95807	.03716 .99207	.05642 .98130	.07643 .96438	.09758 .93894	.11965 .90105	.14196 .84463	.16195 .76329	.17454 .65777	.17557 .54731
.40	.01043 .99743	.03705 .98946	.05602 .97526	.07540 .95326	.09507 .92106	.11443 .87535	.13201 .81290	.14519 .73377	.15126 .64579	.14986 .56277
.50	.01042 .99679	.03691 .98686	.05550 .96937	.07404 .94275	.09208 .90497	.10261 .85415	.12199 .79016	.13034 .71715	.13282 .64358	.13034 .57793
.60	.01040 .99616	.03674 .98433	.05489 .96365	.07247 .93292	.08871 .89030	.10253 .85316	.11240 .77450	.11741 .70858	.11777 .64639	.1474 .59273
.70	.01037 .99552	.03654 .98182	.05418 .95820	.07070 .92384	.08610 .87895	.09643 .82293	.10349 .76417	.10616 .70516	.10522 .65198	.10191 .60713
.80	.01034 .99489	.03634 .97936	.05339 .95297	.06879 .91556	.08149 .86216	.09043 .81390	.09531 .75781	.09634 .70512	.09458 .65920	.09113 .62108
.90	.01031 .99425	.03606 .97646	.05252 .94600	.06675 .90809	.07775 .85950	.08776 .80653	.08785 .75441	.08772 .70734	.08543 .66734	.08195 .63457
1.00	.01029 .99363	.03578 .97159	.05159 .94331	.05465 .90141	.07406 .85240	.07938 .80135	.08109 .75319	.08012 .71408	.07750 .67601	.07404 .64755

$U/K + IV/K$
 -1
 $J+IV=SN$ ($\lambda + IB$)

$K = \sin E$

E	$1/A = .01$	$1/A = .02$	$1/A = .03$	$1/A = .04$	$1/A = .05$	$1/A = .06$	$1/A = .07$	$1/A = .08$	$1/A = .09$	$1/A = .10$
.01	.03641	.02905	.02176	.01706	.01334	.01117	.01014	.00892	.00795	.00717
	.96501	.97605	.97308	.97186	.97126	.97092	.97071	.97058	.97048	.97041
.02	.05834	.07258	.06657	.05743	.04935	.04281	.03709	.03354	.03017	.02738
	.98798	.96993	.95849	.95216	.94855	.94636	.94495	.94399	.94332	.94292
.03	.06569	.10072	.10824	.10290	.09330	.08452	.07616	.06892	.06273	.05744
	.99097	.97215	.95465	.94222	.93393	.92840	.92462	.92195	.92002	.91858
.04	.06473	.11680	.13912	.14312	.13779	.12887	.11914	.10980	.10127	.19365
	.99291	.97567	.95603	.93911	.92620	.91677	.90990	.90486	.90109	.89822
.05	.07023	.12612	.16058	.17539	.17639	.17111	.16216	.15216	.14223	.13287
	.99421	.97896	.95923	.93380	.92324	.91011	.90000	.89226	.88630	.88166
.06	.07107	.13185	.17543	.20135	.20992	.20923	.20275	.19347	.18317	.17280
	.99511	.98165	.96277	.94230	.92324	.90702	.89385	.88337	.87507	.86348
.07	.07159	.13559	.18598	.23448	.23718	.24254	.23979	.23237	.22211	.21192
	.99576	.98382	.96612	.94554	.92435	.90632	.89046	.87739	.86677	.85817
.08	.07193	.13211	.19340	.23418	.25950	.27126	.27239	.26824	.25978	.24944
	.99529	.98557	.96911	.94994	.92777	.90711	.88904	.87362	.86078	.95020
.09	.07217	.13991	.19894	.24559	.27776	.29587	.30247	.30095	.29433	.28481
	.99669	.98701	.97172	.95225	.93062	.90891	.86900	.87149	.85659	.84111
.10	.07234	.14123	.20312	.25454	.29276	.31693	.32855	.33059	.32619	.31787
	.99702	.98813	.97399	.95534	.93371	.91131	.88991	.87056	.85378	.83951

$U/K + IV/K'$
 $\frac{-1}{1}$
 $I+IV = SN$ (A+18)

K=SIN 10

	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.01519	.01454	.01090	.00355	.00639	.00589	.00509	.00447	.00399	.00360
	.99087	.98539	.98357	.98262	.98245	.98224	.98211	.98203	.98197	.98193
.02	.02911	.03634	.03349	.02899	.02497	.02171	.01911	.01702	.01532	.01391
	.99259	.98172	.97470	.97079	.96551	.96177	.96228	.96168	.96526	.6495
.03	.03275	.05036	.05443	.05212	.04730	.04327	.03912	.03549	.03236	.02967
	.99451	.98310	.97254	.96489	.95971	.95621	.95379	.95208	.95083	.94990
.04	.03426	.05623	.06975	.07243	.07042	.06642	.06163	.05729	.05307	.04924
	.99570	.98533	.97357	.96331	.95332	.94935	.94494	.94165	.93916	.93725
.05	.03500	.06278	.08323	.08445	.09030	.08645	.08470	.08020	.07553	.07098
	.99648	.98734	.97565	.96408	.95403	.94583	.93935	.93427	.93029	.92714
.06	.03542	.06557	.08739	.10059	.10576	.10803	.10618	.10263	.09824	.09354
	.99701	.98098	.97789	.96591	.95458	.94467	.93634	.92951	.92394	.91941
.07	.03567	.06737	.09236	.10971	.12002	.12471	.12364	.12020	.11590	
	.99744	.99030	.97996	.96809	.95614	.94501	.93522	.92681	.91972	.91379
.08	.03514	.06260	.09591	.11658	.13761	.13882	.14246	.14080	.13740	
	.99775	.99135	.98178	.97031	.95817	.94633	.93541	.92569	.91722	.90995
.09	.03596	.06846	.09850	.12183	.13905	.15051	.15713	.15986	.15974	.15763
	.99799	.99222	.98336	.97240	.96036	.94815	.93646	.92569	.91605	.90755
.10	.03604	.07010	.10045	.12589	.14582	.16026	.16972	.17498	.17693	.17639
	.99813	.99293	.98473	.97432	.96254	.95022	.93805	.92650	.91567	.90630

$$U/K+IV/X^*$$

$$U + IV = S \oplus N$$

K = SIN 15

$1/B$	$1/A = .01$	$1/A = .02$	$1/A = .03$	$1/A = .04$	$1/A = .05$	$1/A = .06$	$1/A = .07$	$1/A = .08$	$1/A = .09$
.01	.01209	.00967	.00725	.00560	.00465	.00392	.00338	.00297	.00265
	.99302	.98883	.98744	.98687	.98658	.98642	.98632	.98626	.98618
.02	.01934	.02416	.02229	.01930	.01664	.01447	.01274	.01135	.01021
	.99441	.98603	.98067	.97767	.97594	.97489	.97421	.97375	.97342
.03	.02176	.03347	.03622	.03473	.03189	.02869	.02613	.02372	.02164
	.99581	.98710	.97904	.97318	.96921	.96651	.96465	.96333	.96236
.04	.02276	.03869	.04639	.04825	.04700	.04440	.04139	.03839	.03559
	.99671	.98861	.97985	.97202	.96591	.96132	.95791	.95537	.95343
.05	.02325	.04170	.05332	.05888	.06024	.05913	.05676	.05384	.05079
	.99731	.99035	.98146	.97266	.96499	.95871	.95372	.94979	.94669
.06	.02353	.04354	.05804	.06690	.07116	.07218	.07116	.06896	.06617
	.99773	.99160	.98316	.97410	.96549	.95793	.95154	.94626	.94194
.07	.02370	.04473	.06132	.07290	.07991	.08329	.08406	.08306	.08102
	.99804	.99261	.98477	.97579	.96675	.95632	.95063	.94437	.93036
.08	.02381	.04554	.06365	.07741	.08687	.09258	.09532	.09587	.09490
	.99828	.99341	.98616	.97750	.96835	.95942	.95113	.94370	.93718
.09	.02389	.04611	.06536	.08085	.09239	.10026	.10499	.10723	.10759
	.99847	.99407	.98737	.97911	.97006	.96089	.95208	.94391	.93653
.10	.02394	.04653	.06664	.08350	.09680	.10660	.11324	.11721	.11904
	.99862	.99462	.98841	.98057	.97175	.96254	.95342	.94472	.93666

$$U/K + IV/K^2$$

$$U + IV = SN \quad (A + IB)^{-1}$$

K=SIN 20

	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	*.00902	*.00722	*.00541	*.00424	*.00347	*.00293	*.00253	*.00222	*.00198	*.00179
	*.99416	*.99066	*.98949	*.98901	*.98878	*.98864	*.98856	*.98851	*.98847	*.98844
.02	*.01444	*.01604	*.01665	*.01442	*.01243	*.01018	*.00952	*.00848	*.00763	*.00693
	*.99533	*.96632	*.96383	*.96132	*.97988	*.97899	*.97842	*.97804	*.97776	*.97756
.03	*.01624	*.02499	*.02705	*.02595	*.02384	*.02160	*.01955	*.01774	*.01619	*.01465
	*.99650	*.96922	*.96246	*.97558	*.97425	*.97199	*.97043	*.96932	*.96850	*.96790
.04	*.01699	*.02888	*.03605	*.03514	*.03322	*.03098	*.02875	*.02666	*.02476	
	*.99725	*.99065	*.98317	*.97662	*.97150	*.96766	*.96420	*.96266	*.96103	*.95976
.05	*.01736	*.03142	*.03981	*.04398	*.04503	*.04424	*.04250	*.04034	*.03807	*.03584
	*.99775	*.99194	*.98452	*.97117	*.97076	*.96550	*.96131	*.95801	*.95541	*.95333
.06	*.01756	*.03250	*.04332	*.04996	*.05316	*.05399	*.05328	*.05168	*.04963	*.04738
	*.99811	*.99299	*.98596	*.97838	*.97120	*.96488	*.95953	*.95510	*.95147	*.94849
.07	*.01769	*.03339	*.04576	*.05442	*.05970	*.05228	*.06292	*.06226	*.06078	*.0583
	*.99036	*.99382	*.98728	*.97981	*.97227	*.95896	*.95524	*.95357	*.94893	*.94507
.08	*.01777	*.03399	*.04750	*.05778	*.06487	*.06919	*.07432	*.07162	*.07149	*.06980
	*.99856	*.99450	*.98845	*.98124	*.97363	*.96619	*.95928	*.95307	*.94761	*.94286
.09	*.01783	*.03441	*.04877	*.06033	*.06897	*.07490	*.07852	*.08030	*.08068	*.08006
	*.99872	*.99505	*.98945	*.98258	*.97506	*.96744	*.96011	*.95330	*.94713	*.94163
.10	*.01787	*.03473	*.04972	*.06230	*.07224	*.07960	*.08464	*.08772	*.08922	*.08951
	*.99884	*.99550	*.99033	*.98381	*.97649	*.96884	*.96127	*.95404	*.94731	*.94117

$V/K + IV/K$
 $U+IV=SN^{-1}$
 $(A+IB)$

K=SIN 25

	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00717 .99486	.00574 .99180	.00430 .99078	.00338 .99035	.00276 .99015	.00233 .99003	.00201 .98991	.00177 .98988	.00157 .98985	.00142
.02	.01148 .99590	.01435 .98975	.01324 .98581	.01147 .98360	.00985 .98233	.00860 .98156	.00757 .9805	.00674 .98071	.00607 .98047	.00551
.03	.01292 .99692	.01987 .99053	.02151 .98462	.02064 .98032	.01696 .97739	.01719 .97541	.01556 .97403	.01412 .97306	.01288 .97234	.01182
.04	.01351 .99759	.02296 .99179	.02754 .98523	.02867 .97948	.02796 .97499	.02643 .97161	.02466 .96910	.02249 .96721	.02123 .96578	.01972
.05	.01360 .99803	.02474 .99293	.03165 .98642	.03498 .97997	.03582 .97434	.03521 .96973	.03383 .96605	.03213 .96314	.03033 .96085	.02856
.06	.01396 .99834	.02563 .99384	.03444 .98768	.03973 .98104	.04230 .97474	.04296 .96919	.04241 .96450	.04116 .956160	.03954 .95740	.03777
.07	.01406 .99856	.02654 .99458	.03638 .98885	.04327 .98229	.04748 .97569	.04955 .96953	.05009 .96403	.0459 .95926	.04643 .95523	.04690
.08	.01413 .99874	.02702 .99517	.03776 .98987	.04593 .98355	.05158 .97686	.05504 .97037	.05676 .96431	.05719 .95886	.05672 .95406	.05565
.09	.01418 .99887	.02736 .99565	.03876 .99075	.04795 .98473	.05483 .97815	.05957 .97148	.06248 .96506	.06393 .95909	.06428 .95368	.06383
.10	.01421 .99898	.02760 .99605	.03952 .99152	.04951 .98581	.05742 .97940	.06229 .97272	.06733 .96609	.06982 .95976	.07107 .95386	.07135

$U/K+JV/K^*$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 30										
1/6	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00593	.00474	.00356	.00279	.00226	.00192	.00166	.00146	.00130	.00117
	.99536	.99256	.99165	.99127	.99106	.99098	.99091	.99087	.99084	.99082
.02	.00949	.01186	.01095	.00949	.00816	.00711	.00626	.00558	.00502	.00456
	.99829	.99072	.98716	.98516	.98461	.98331	.98286	.98255	.98233	.98217
.03	.01068	.01643	.01779	.01707	.01569	.01422	.01267	.01166	.01066	.00978
	.99722	.99144	.98608	.98219	.97954	.97774	.97650	.97562	.97497	.97449
.04	.01117	.01898	.02277	.02371	.02312	.02187	.02040	.01894	.01757	.01632
	.99762	.99256	.98664	.98144	.9737	.97431	.97204	.97033	.96903	.96804
.05	.01141	.02046	.02617	.02892	.02963	.02913	.02789	.02659	.02510	.02364
	.99822	.99360	.98771	.98168	.97679	.97261	.96928	.96665	.96457	.96292
.06	.01154	.02136	.02646	.03285	.03496	.03556	.03509	.03407	.03223	.03127
	.99850	.99443	.98686	.98205	.97716	.97214	.96786	.96436	.96146	.95908
.07	.01163	.02154	.03008	.03578	.03926	.04099	.04114	.04104	.04009	.03884
	.99870	.99510	.98991	.98399	.97802	.97244	.96747	.96317	.95950	.95639
.08	.01168	.02234	.03121	.03797	.04265	.04552	.04696	.04733	.04608	.04608
	.99886	.99563	.99084	.98513	.97910	.97321	.96773	.96280	.95846	.95466
.09	.01172	.02262	.03205	.03964	.04533	.04926	.05168	.05290	.05321	.05285
	.99898	.99607	.99164	.98620	.98025	.97422	.96842	.96302	.95813	.95375
.10	.01175	.02282	.03267	.04093	.04747	.05233	.05569	.05777	.05882	.05907
	.99908	.99643	.99233	.98717	.98136	.97535	.96936	.96364	.95831	.95344

$U/K + IV/K^*$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 35

	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00504	.00403	.00302	.00237	.00194	.00163	.00141	.00124	.00111	.00100
	.99572	.99315	.99229	.99194	.99176	.99166	.99160	.99156	.99154	.99152
.02	.00806	.01007	.00929	.00805	.00694	.00604	.00532	.00474	.00426	.00387
	.99657	.99143	.98814	.98629	.98523	.98458	.98416	.98367	.98367	.98353
.03	.00906	.01394	.01510	.01449	.01332	.01207	.01093	.00992	.00905	.00830
	.99743	.99209	.98714	.98355	.98110	.97944	.97829	.97747	.97667	.97643
.04	.00948	.01611	.01933	.02013	.01963	.01857	.01732	.01608	.01492	.01306
	.99798	.99314	.98765	.98285	.97909	.97627	.97416	.97259	.97139	.97047
.05	.00968	.01736	.02221	.02455	.02515	.02473	.02377	.02258	.02132	.02008
	.99835	.99409	.98865	.98327	.97856	.97470	.97162	.96919	.96726	.96574
.06	.00980	.01813	.02417	.02788	.02970	.03017	.02980	.02893	.02780	.02657
	.99861	.99486	.98971	.98416	.97890	.97426	.97033	.96707	.96439	.96219
.07	.00987	.01862	.02553	.03037	.03333	.03460	.03519	.03485	.03406	.03299
	.99880	.99547	.99068	.98521	.97970	.97455	.96996	.96598	.96259	.95972
.08	.00992	.01896	.02649	.03223	.03620	.03864	.03987	.04019	.03980	.03915
	.99895	.99596	.99154	.98626	.98070	.97526	.97021	.96565	.96164	.95814
.09	.00995	.01920	.02720	.03365	.03848	.04181	.04388	.04492	.04519	.04490
	.99905	.99637	.99228	.98725	.98176	.97620	.97084	.96586	.96134	.95729
.10	.00997	.01937	.02773	.03474	.04029	.04442	.04728	.04905	.04995	.05018
	.99915	.99670	.99291	.98815	.98281	.97724	.97172	.96644	.96152	.95701

U/K+IV/K'
 \cdot^{-1}
U+IV=SN (A+IB)

K=SIN⁻¹ 40

	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00435 .99598	.00348 .99357	.00261 .99277	.00205 .99244	.00167 .99227	.00141 .99218	.00122 .99212	.00107 .99209	.00096 .99206	.00086 .99204
.02	.00597 .99678	.00871 .99196	.00803 .98887	.00696 .98714	.00600 .98614	.00522 .98553	.00460 .98514	.00409 .98467	.00369 .98466	.00335 .98455
.03	.00784 .92759	.01206 .99253	.01306 .98794	.01253 .98457	.01252 .98227	.01044 .98071	.00945 .97953	.00858 .97867	.00783 .97830	.00716 .97789
.04	.00820 .99811	.01393 .99357	.01671 .98842	.01741 .95392	.01698 .98039	.01606 .97774	.01498 .97576	.01391 .97428	.01290 .97316	.01199 .97229
.05	.00837 .99845	.01501 .99445	.01921 .96935	.02123 .98430	.02175 .97989	.02139 .97627	.02056 .97338	.01953 .97110	.01844 .96929	.01737 .96786
.06	.00847 .99870	.01567 .99517	.02090 .99035	.02411 .98514	.02568 .98021	.02609 .97586	.02577 .97218	.02502 .96912	.02405 .96660	.02298 .96454
.07	.00853 .99887	.01610 .99575	.02207 .99126	.02625 .98613	.02682 .98096	.03009 .97613	.03043 .97183	.03014 .96810	.02946 .96491	.02854 .96222
.08	.00857 .99901	.01639 .99622	.02291 .99206	.02787 .98712	.03130 .98190	.03342 .97680	.03448 .97206	.03476 .96779	.03450 .96402	.03387 .96074
.09	.00860 .99912	.01660 .99659	.02352 .99276	.02939 .99805	.03327 .98290	.03616 .97769	.03794 .9756	.03885 .96799	.03909 .96375	.03864 .95995
.10	.00862 .99920	.01675 .99691	.02397 .99336	.03003 .96869	.03484 .96388	.03841 .97348	.04068 .96653	.04242 .96392	.04321 .95970	.04341 .95970

$U/K + IV/K'$
 -1
 $U + IV = SN \quad (A + IB)$

K=SIN 45

	1/B	1/A= .01	1/A= .02	1/A= .03	1/A= .04	1/A= .05	1/A= .06	1/A= .07	1/A= .08	1/A= .09	1/A= .10
.01	.00381 .99619	.00305 .99390	.00229 .99314	.00179 .99282	.00147 .99267	.00124 .99258	.00107 .99253	.00094 .99249	.00084 .99247	.00076 .99245	
.02	.00610 .99695	.00763 .99237	.00704 .98944	.00610 .98780	.00526 .98695	.00457 .98627	.00403 .98590	.00359 .98564	.00323 .98546	.00293 .98533	
.03	.00687 .99771	.01056 .99296	.01144 .98856	.01098 .98535	.01009 .98317	.00915 .98170	.00828 .98067	.00752 .97994	.00686 .97941	.00629 .97901	
.04	.00716 .99821	.01220 .99390	.01464 .98901	.01525 .98474	.01487 .98139	.01407 .97887	.01313 .97700	.01219 .97559	.01131 .97453	.01050 .97371	
.05	.00733 .99853	.01315 .99474	.01683 .98990	.01860 .98511	.01906 .98092	.01874 .97748	.01601 .97474	.01711 .97257	.01616 .97086	.01522 .96950	
.06	.00742 .99876	.01373 .99542	.01831 .99084	.02112 .98590	.02250 .98122	.02286 .97710	.02258 .97360	.02193 .97070	.02108 .96831	.02014 .96635	
.07	.00746 .99893	.01411 .99597	.01933 .99171	.02300 .98684	.02525 .98194	.02636 .97736	.02666 .97327	.02641 .96973	.02582 .96671	.02501 .96415	
.08	.00751 .99906	.01436 .99641	.02007 .99247	.02441 .98778	.02742 .98283	.02924 .97799	.03021 .97349	.03046 .96944	.03023 .96587	.02968 .96275	
.09	.00753 .99916	.01454 .99677	.02060 .99313	.02548 .98866	.02914 .98376	.03167 .97883	.03324 .97407	.03404 .96963	.03425 .96561	.03404 .96201	
.10	.00755 .99924	.01467 .99706	.02100 .99370	.02631 .98946	.03052 .98471	.03365 .97976	.03582 .97485	.03717 .97015	.03786 .96577	.03804 .96177	

$U/K + IV/K'$
 -1
 $U + IV - SN \quad (A+18)$

K=SIN 50

	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00337 .99635	.00270 .99416	.00202 .99342	.00159 .99312	.00130 .99298	.00119 .99281	.00094 .99281	.00083 .99278	.00074 .99278	.00067 .99277
.02	.00540 .99708	.00674 .99269	.00622 .98988	.00539 .98831	.00465 .98740	.00404 .98685	.00356 .98649	.00317 .98625	.00286 .98598	.00259 .98595
.03	.00697 .99761	.00934 .99325	.01011 .98904	.00971 .98904	.00892 .98360	.00809 .98247	.00732 .98149	.00665 .98079	.00605 .98020	.00556 .97990
.04	.00635 .99828	.01079 .99415	.01295 .98948	.01348 .90538	.01315 .98218	.01244 .97977	.01161 .97797	.01176 .97662	.01000 .97560	.00929 .97481
.05	.00649 .99859	.01163 .99496	.01488 .96032	.01645 .98574	.01685 .98172	.01657 .97841	.01593 .97581	.01513 .97373	.01429 .97209	.01346 .97078
.06	.00656 .99862	.01214 .99561	.01619 .99123	.01367 .58650	.01989 .98202	.02022 .97806	.01997 .97471	.01939 .97193	.01864 .96954	.01781 .96777
.07	.00661 .99898	.01247 .99614	.01710 .99206	.02034 .98740	.02232 .98270	.02331 .97831	.02358 .97440	.02336 .97101	.02283 .96811	.02212 .96566
.08	.00664 .99910	.01270 .99656	.01774 .99279	.02158 .98830	.02425 .98356	.02589 .97892	.02671 .97462	.02694 .97073	.02674 .96731	.02625 .96433
.09	.00666 .39920	.01286 .99690	.01821 .99342	.02253 .98914	.02577 .98446	.02801 .97973	.02939 .97517	.03010 .97092	.03029 .96706	.03011 .96361
.10	.00668 .99928	.01297 .99719	.01657 .99396	.02326 .98991	.02698 .98536	.02975 .98062	.03167 .97591	.03287 .97142	.03348 .96723	.03365 .96339

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 55

1/A	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00200	.00240	.00180	.00141	.00115	.00097	.00084	.00074	.00066	.00059
	.99647	.99436	.99365	.99336	.99322	.99314	.99309	.99306	.99303	.99302
.02	.00480	.00600	.00554	.00480	.00414	.00360	.00317	.00282	.00254	.00231
	.99718	.99295	.99024	.98872	.98784	.98732	.98696	.98673	.98556	.98444
.03	.00540	.00631	.00900	.00364	.00794	.00719	.00651	.00591	.00540	.00485
	.99788	.99349	.98942	.98646	.98445	.98308	.98213	.98146	.98096	.96060
.04	.00565	.00960	.01152	.01203	.01179	.01107	.01033	.00959	.00890	.00826
	.99634	.99436	.98984	.98589	.98280	.98047	.97874	.97744	.97645	.97562
.05	.00577	.01135	.011323	.01463	.01499	.01474	.01417	.01346	.01271	.01198
	.99864	.99514	.99066	.98623	.98236	.97918	.97665	.97464	.97306	.97160
.06	.00584	.01080	.01440	.01661	.01770	.01799	.01777	.01725	.01658	.01585
	.99886	.99577	.99153	.98697	.98265	.97883	.97560	.97291	.97070	.96889
.07	.00588	.01110	.01521	.01809	.01986	.02074	.02098	.02078	.02031	.01969
	.99901	.99627	.99233	.98784	.98331	.97907	.97529	.97202	.96923	.96686
.08	.00591	.01129	.01578	.01920	.02157	.02303	.02377	.02397	.02379	.02336
	.99913	.99668	.99304	.98870	.98413	.97965	.97550	.97176	.96845	.96557
.09	.00593	.01144	.01620	.02004	.02292	.02492	.02615	.02678	.02695	.02679
	.99923	.99701	.99365	.98952	.98501	.98044	.97603	.97194	.96822	.96489
.10	.00594	.01154	.01652	.02069	.02400	.02647	.02817	.02924	.02979	.02994
	.99930	.99729	.99417	.99026	.98587	.98129	.97676	.97242	.96837	.96467

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 60

	1/B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00268 .99653	.00214 .99452	.00161 .99384	.00126 .99355	.00103 .99341	.00087 .99334	.00075 .99329	.00066 .99326	.00059 .99323	.00052 .99322	
.02	.00428 .99726	.00534 .99315	.00495 .99052	.00428 .98904	.00369 .98819	.00321 .98767	.00283 .98734	.00252 .98711	.00227 .98695	.00206 .98683	
.03	.00682 .99794	.00741 .99368	.00602 .98972	.00771 .98585	.00706 .98489	.00642 .98356	.00581 .98264	.00520 .98199	.00482 .98151	.00442 .98115	
.04	.00504 .99639	.00557 .99452	.00426 .99013	.01026 .98630	.01071 .98329	.01044 .98103	.00983 .97935	.00922 .97806	.00856 .97712	.00794 .97712	
.05	.00515 .99468	.00923 .99527	.01161 .99593	.01306 .96663	.01336 .98287	.01316 .97978	.01265 .97732	.01202 .97537	.01135 .97383	.01069 .97261	
.06	.00521 .99689	.00964 .99569	.01285 .98177	.01483 .98734	.01579 .98314	.01605 .97344	.01586 .97369	.01540 .97154	.01480 .96978	.01415 .96978	
.07	.00525 .99934	.00990 .95638	.01357 .99255	.01615 .98819	.01772 .98378	.01851 .97967	.01672 .97600	.01855 .97262	.01813 .97011	.01757 .96781	
.08	.00527 .99916	.01028 .99678	.01409 .99324	.01714 .98903	.01925 .98459	.02055 .98025	.02121 .97621	.02139 .97257	.02123 .96936	.02085 .96656	
.09	.00529 .99925	.01021 .99710	.01446 .99393	.01789 .90982	.02046 .98544	.02224 .98100	.02334 .97672	.02390 .97274	.02406 .96913	.02391 .96589	
.10	.00530 .99932	.01030 .99736	.01474 .99434	.01847 .99054	.02142 .98628	.02362 .98183	.02515 .97743	.02610 .97321	.02659 .96928	.02672 .96568	

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 65

	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00239 .99665	.00191 .99465	.00143 .99398	.00112 .99370	.00092 .99357	.00077 .99349	.00067 .99344	.00059 .99341	.00052 .99339	.00047 .99338
.02	.00382 .99732	.00478 .99331	.00441 .99074	.00382 .98329	.00329 .98646	.00267 .98796	.00252 .98763	.00225 .98741	.00202 .98725	.00184 .98713
.05	.00630 .99799	.00662 .99362	.00717 .98996	.00688 .98715	.00632 .98524	.00573 .98394	.00519 .98304	.00471 .98240	.00430 .98194	.00394 .98159
.04	.00450 .99843	.00765 .99465	.00917 .99036	.00356 .98661	.00932 .98368	.00882 .98147	.00823 .97982	.00764 .97859	.00709 .97765	.00658 .97693
.05	.00460 .99871	.00824 .99538	.01054 .95114	.01165 .98694	.01194 .98326	.01174 .98025	.01129 .97794	.01073 .97594	.01013 .97444	.00954 .97324
.06	.00465 .99831	.00860 .99598	.01147 .95197	.01323 .98764	.01410 .96353	.01433 .97391	.01415 .97684	.01375 .97430	.01321 .97220	.01263 .97048
.07	.00468 .99906	.00884 .99646	.01211 .99273	.01441 .98846	.01582 .98416	.01652 .98014	.01671 .97656	.01656 .97345	.01618 .97080	.01568 .96855
.08	.00471 .99918	.00900 .99685	.01257 .99340	.01529 .98926	.01718 .98494	.01634 .98070	.01893 .9776	.01909 .97320	.01895 .97007	.01861 .95733
.09	.00472 .99927	.00911 .99716	.01291 .99397	.01597 .99006	.01826 .98578	.01985 .98144	.02083 .97726	.02134 .97338	.02147 .96984	.02134 .96669
.10	.00473 .99934	.00919 .99743	.01316 .99447	.01618 .99076	.01912 .98660	.02108 .98225	.02244 .97795	.02329 .97383	.02373 .97000	.02355 .96648

$U/K + IV/K$
 -1
 $U+IV=SN$ (A+IB)

K=SIN 70

1/A	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00212 .99672	.00170 .99474	.00127 .99409	.00100 .99382	.00062 .99368	.00069 .99361	.00059 .99356	.00052 .99353	.00047 .99351	.00042 .99350
.02	.00340 .99377	.00425 .99343	.00392 .99090	.00340 .98943	.00293 .98867	.00255 .96814	.00224 .98785	.00200 .98764	.00180 .98748	.00163 .98737
.03	.00382 .99603	.00500 .99394	.00637 .99015	.00612 .98739	.00562 .98551	.00510 .98424	.00461 .98335	.00419 .98273	.00382 .98227	.00351 .98192
.04	.00400 .99645	.00600 .99474	.00816 .99054	.00850 .98666	.00629 .98396	.00784 .98181	.00731 .98019	.00679 .97898	.00630 .97805	.00565 .97735
.05	.00409 .99674	.00733 .99547	.00937 .93130	.01036 .98718	.01062 .98357	.01044 .98061	.01004 .97825	.00954 .97638	.00901 .97490	.00846 .97373
.06	.00413 .99893	.00765 .99606	.01020 .98211	.01177 .9876	.01253 .98384	.01274 .98023	.01258 .97727	.01222 .97477	.01175 .97271	.01123 .97102
.07	.00416 .99903	.00786 .99652	.01077 .93206	.01281 .98367	.01406 .98445	.01469 .96051	.01486 .97699	.01472 .97394	.01439 .97133	.01395 .96943
.08	.00418 .99919	.00800 .99691	.01118 .99352	.01360 .98546	.01528 .98522	.01631 .98106	.01663 .97718	.01685 .97369	.01685 .97369	.01655 .97369
.09	.00420 .99928	.00810 .99722	.01147 .99498	.01419 .99024	.01623 .95604	.01765 .98178	.01852 .97768	.01897 .97386	.01898 .97386	.01898 .96730
.10	.00421 .99935	.00817 .99747	.01170 .99457	.01465 .99093	.01700 .98684	.01874 .98258	.01995 .97836	.02071 .97431	.02110 .97055	.02121 .96710

$U/K + IV/K^*$
 -1
 $U + IV = SN \quad (A + IB)$

K=SNH 75

$1/A = .01$	$1/A = .02$	$1/A = .03$	$1/A = .04$	$1/A = .05$	$1/A = .06$	$1/A = .07$	$1/A = .08$	$1/A = .09$	$1/A = .10$
.01 .99676	.00187 .99482	.00150 .99417	.00112 .99390	.00080 .99377	.00072 .99370	.00061 .99365	.00052 .99362	.00046 .99360	.00037 .99359
.02 .99741	.00299 .99352	.00345 .99103	.00299 .98964	.00258 .98863	.00224 .98834	.00196 .98802	.00176 .98781	.00156 .98766	.00144 .98754
.03 .99806	.00337 .99442	.00510 .99028	.00501 .98756	.00538 .98571	.00495 .98445	.00449 .98356	.00406 .98296	.00369 .98251	.00309 .98217
.04 .99848	.00352 .99402	.00598 .99087	.00718 .98704	.00748 .98640	.00729 .98620	.00690 .98607	.00644 .98607	.00593 .97927	.00555 .97837
.05 .99875	.00360 .99553	.00645 .99142	.00825 .98735	.00912 .98380	.00935 .98380	.00913 .98068	.00884 .97855	.00839 .97671	.00793 .97525
.06 .99895	.00364 .99658	.00673 .99296	.00898 .99222	.01036 .99611	.01103 .98803	.01121 .98406	.01108 .98055	.01076 .97750	.01034 .97512
.07 .99909	.00367 .99695	.00692 .99361	.00946 .98963	.01128 .98543	.01248 .98132	.01293 .98075	.01306 .97731	.01296 .97430	.01267 .97173
.08 .99920	.00368 .99726	.00704 .99417	.00604 .99037	.01197 .98623	.01345 .98623	.01436 .98623	.01482 .97799	.01494 .97423	.01483 .97081
.09 .99929	.00369 .99751	.00713 .99465	.00719 .99105	.01030 .99465	.01290 .98702	.01496 .98282	.01650 .97866	.01823 .97467	.01657 .97096
.10 .99936	.00370 .99751								

$U/K+IV/K$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 60

	1/B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00161	.00129	.00097	.00076	.00062	.00052	.00045	.00040	.00035	.00032	
	.99679	.99467	.99423	.99396	.99363	.99376	.99371	.99366	.99365		
.02	.00256	.00322	.00297	.00258	.00222	.00193	.00170	.00151	.00136	.00124	
	.99743	.99356	.99112	.98974	.98894	.98845	.98814	.98793	.98777	.98766	
.03	.00290	.00446	.00483	.00464	.00426	.00386	.00350	.00317	.00290	.00266	
	.99606	.99408	.99038	.98768	.98585	.98460	.98374	.98313	.98268	.98235	
.04	.00303	.00515	.00618	.00644	.00628	.00594	.00554	.00515	.00476	.00444	
	.99849	.99487	.99076	.98717	.98435	.98223	.98066	.97947	.97656	.97768	
.05	.00310	.00555	.00710	.00765	.00805	.00791	.00761	.00723	.00683	.00643	
	.99677	.99557	.99151	.98748	.98396	.98196	.97876	.97693	.97549	.97434	
.06	.00313	.00580	.00773	.00892	.00950	.00965	.00954	.00926	.00890	.00851	
	.99396	.99615	.99230	.98615	.98421	.98074	.97760	.97536	.97335	.97170	
.07	.00316	.00595	.00816	.00971	.01066	.01113	.01126	.01116	.01091	.01057	
	.99910	.99661	.99303	.98894	.98481	.98096	.97753	.97455	.97201	.96985	
.08	.00317	.00606	.00847	.01031	.01158	.01236	.01276	.01287	.01277	.01254	
	.99921	.99698	.99367	.98973	.98557	.98150	.97772	.97431	.97130	.96868	
.09	.00318	.00614	.00870	.01076	.01230	.01337	.01404	.01436	.01447	.01436	
	.99930	.99728	.99422	.99047	.98636	.98221	.97820	.97448	.97109	.96806	
.10	.00319	.00619	.00886	.01111	.01288	.01421	.01512	.01570	.01599	.01607	
	.99936	.99753	.99470	.99114	.98715	.98299	.97866	.97492	.97124	.96787	

$U/K+IV/K'$
 $U+IV=SN^{-1}(A+IB)$

K=SIN 65

1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01 .99681	.00131 .99490	.00105 .99426	.00079 .99400	.00062 .99387	.00050 .99379	.00042 .99375	.00037 .99372	.00029 .99370	.00026 .99369
.02 .99745	.00210 .99362	.00262 .99117	.00242 .98979	.00210 .98900	.00181 .98852	.00157 .98821	.00138 .98799	.00123 .98784	.00111 .98774
.03 .99809	.00236 .99411	.00363 .99043	.00393 .98775	.00377 .98593	.00347 .98469	.00314 .98394	.00264 .98323	.00236 .98278	.00216 .98245
.04 .99850	.00247 .99490	.00419 .99081	.00503 .98724	.00524 .98444	.00511 .98234	.00483 .98077	.00451 .97959	.00389 .97870	.00361 .97601
.05 .99877	.00252 .99560	.00452 .99155	.00578 .98755	.00639 .98405	.00655 .98117	.00644 .97888	.00619 .97706	.00588 .97563	.00555 .97449
.06 .99897	.00255 .99617	.00472 .99234	.00629 .98822	.00725 .98430	.00773 .98085	.00785 .97793	.00776 .97550	.00754 .97350	.00724 .97186
.07 .99911	.00257 .99663	.00484 .99307	.00664 .98900	.00790 .98490	.00867 .98107	.00906 .97766	.00916 .97470	.00887 .97217	.00860 .97002
.08 .99921	.00258 .99730	.00493 .99370	.00689 .98979	.00838 .98565	.00942 .98161	.01006 .97785	.01036 .97446	.01039 .97147	.01020 .96866
.09 .99930	.00259 .99730	.00499 .99426	.00707 .99052	.00675 .98644	.01001 .98231	.01084 .97833	.01142 .97463	.01170 .97126	.01177 .96625
.10 .99937	.00259 .99755	.00504 .99473	.00721 .99119	.00904 .98722	.01048 .98309	.01156 .97699	.01230 .97506	.01277 .97140	.01301 .96806

$$\frac{U/K + iV/K'}{U+iV=SN}^{-1}_{(A+iB)}$$

K=SIN 86

	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00124 .99681	.00099 .99690	.00074 .99426	.00058 .94000	.00048 .99387	.00040 .99380	.00035 .99375	.00030 .99372	.00027 .99370	.00024 .99369
.02	.00198 .99745	.00247 .99363	.00228 .99117	.00196 .99980	.00171 .98901	.00143 .98053	.00131 .98822	.00116 .98800	.00105 .98785	.00095 .98774
.03	.00223 .99809	.00342 .99412	.00371 .99044	.00356 .98776	.00327 .98594	.00297 .98470	.00269 .98385	.00244 .98324	.00222 .98279	.00204 .98246
.04	.00233 .99850	.00396 .99490	.00475 .99082	.00495 .98725	.00442 .98445	.00456 .98235	.00426 .98078	.00395 .97961	.00367 .97871	.00341 .97803
.05	.00238 .99877	.00425 .99560	.00546 .99156	.00603 .98755	.00510 .98406	.00600 .98119	.00584 .97889	.00555 .97708	.00524 .97565	.00494 .97451
.06	.00241 .99897	.00445 .99617	.00594 .99235	.00685 .98922	.00730 .98432	.00742 .98087	.00733 .97794	.00712 .97552	.00684 .97352	.00654 .97168
.07	.00242 .99911	.00457 .99663	.00627 .99307	.00746 .98901	.00819 .98491	.00857 .98103	.00865 .97767	.00857 .97471	.00838 .97219	.00812 .97004
.08	.00244 .99922	.00466 .99700	.00651 .99371	.00792 .98979	.00819 .98566	.00849 .98162	.00980 .97746	.00988 .97448	.00981 .97149	.00963 .95888
.09	.00244 .99930	.00471 .99730	.00668 .99426	.00826 .99053	.00945 .98645	.01027 .98237	.01078 .97874	.01104 .97464	.01112 .97128	.01105 .96827
.10	.00245 .99937	.00476 .99755	.00681 .99473	.00953 .99120	.00990 .98723	.01091 .98311	.01162 .97900	.01206 .97508	.01228 .97142	.01235 .96806

$U/K+IV/K^*$
 -1
 $U+IV=SH \quad (A+IB)$

K=STH 87

	1/B	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00115 .99681	.00092 .99490	.00069 .99427	.00054 .99400	.00044 .99387	.00037 .99360	.00032 .99373	.00026 .99371	.00025 .99369	.00023 .99369	
.02	.00185 .99745	.00231 .99363	.00213 .99116	.00185 .98981	.00159 .98902	.00138 .98853	.00122 .98822	.00109 .98801	.00098 .98766	.00089 .98775	
.03	.00206 .99809	.00326 .99612	.00346 .99044	.00332 .98777	.00305 .98595	.00277 .98471	.00251 .98386	.00227 .98325	.00208 .98280	.00190 .98247	
.04	.00217 .99850	.00359 .99490	.00443 .99082	.00461 .98726	.00450 .98446	.00426 .98230	.00397 .98079	.00369 .97962	.00342 .97872	.00318 .97804	
.05	.00222 .99877	.00398 .99561	.00509 .99156	.00563 .98756	.00577 .98407	.00567 .98120	.00545 .97890	.00516 .97709	.00489 .97566	.00461 .97452	
.06	.00225 .99897	.00415 .99618	.00554 .99235	.00633 .98823	.00681 .98432	.00692 .98086	.00684 .97795	.00664 .97553	.00638 .97353	.00610 .97169	
.07	.00226 .99911	.00427 .99663	.00585 .99308	.00696 .98901	.00764 .98492	.00798 .98110	.00807 .97768	.00600 .97473	.00758 .97220	.0072 .97006	
.08	.00227 .99922	.00434 .99700	.00607 .99371	.00739 .98980	.00839 .98567	.00886 .98163	.00914 .97787	.00922 .97449	.00915 .97150	.00899 .96890	
.09	.00228 .99930	.00440 .99730	.00623 .99426	.00771 .99053	.00882 .98646	.00959 .96233	.01006 .97836	.01031 .97466	.01037 .97129	.01031 .96829	
.10	.00229 .99937	.00444 .99755	.00635 .99474	.00796 .99120	.00923 .98724	.01018 .98311	.01084 .97901	.01125 .97509	.01146 .97144	.01152 .96809	

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 88

$1/B$	$1/A = .01$	$1/A = .02$	$1/A = .03$	$1/A = .04$	$1/A = .05$	$1/A = .06$	$1/A = .07$	$1/A = .08$	$1/A = .09$	$1/A = .10$
.01	.00105 .99682	.00064 .99491	.00063 .99427	.00050 .99401	.00041 .99386	.00054 .99360	.00030 .99376	.00026 .99373	.00023 .99371	.00021 .99370
.02	.00169 .99745	.00211 .99363	.00195 .99116	.00169 .98981	.00145 .98902	.00127 .98854	.00111 .98823	.00099 .98801	.00089 .98786	.00081 .98775
.03	.00190 .99809	.00292 .99412	.00316 .99045	.00304 .98777	.00279 .98595	.00253 .98472	.00229 .98386	.00208 .98325	.00190 .98281	.00174 .98248
.04	.00199 .99850	.00338 .99490	.00405 .99083	.00422 .98726	.00411 .98447	.00369 .98236	.00363 .98080	.00337 .97962	.00313 .97673	.00291 .97605
.05	.00203 .99376	.00364 .99561	.00465 .99157	.00514 .98757	.00527 .98407	.00518 .98120	.00498 .97891	.00474 .97710	.00447 .97567	.00421 .97453
.06	.00205 .99697	.00380 .99618	.00506 .99235	.00584 .98824	.00622 .98433	.00633 .98088	.00625 .97796	.00607 .97554	.00583 .97354	.00558 .97190
.07	.00207 .99911	.00390 .99663	.00535 .99308	.00636 .98902	.00696 .98493	.00729 .98110	.00738 .97769	.00731 .97474	.00715 .97221	.00707 .97007
.08	.00208 .99922	.00397 .99700	.00555 .99371	.00675 .98980	.00759 .98567	.00910 .98164	.00836 .97708	.00843 .97450	.00837 .97152	.00822 .96891
.09	.00208 .99930	.00402 .99730	.00570 .99426	.00705 .99054	.00806 .98647	.00876 .98234	.00920 .97836	.00942 .97467	.00946 .97130	.00942 .96830
.10	.00209 .99937	.00406 .99755	.00581 .99474	.00728 .99121	.00844 .98725	.00931 .98311	.00991 .97902	.01028 .97510	.01048 .97145	.01053 .96811

$U/K \approx IV/K \approx$
 -1
 $U+IV=SN^{-1}(A+IB)$

K=SIN 89

	1/A = .01	1/A = .02	1/A = .03	1/A = .04	1/A = .05	1/A = .06	1/A = .07	1/A = .08	1/A = .09	1/A = .10
.01	.00092	.00074	.00055	.00043	.00035	.00030	.00026	.00023	.00020	.00018
	.99682	.99491	.99427	.99401	.99388	.99361	.99376	.99373	.99371	.99370
.02	.00147	.00184	.00170	.00147	.00127	.00110	.00097	.00087	.00078	.00071
	.99745	.99363	.99118	.98981	.98902	.98854	.98823	.98802	.98787	.98776
.03	.00166	.00255	.00276	.00265	.00243	.00221	.00200	.00181	.00166	.00152
	.99809	.99412	.99045	.98777	.98596	.98472	.98387	.98326	.98261	.98248
.04	.00173	.00294	.00353	.00368	.00359	.00340	.00317	.00294	.00273	.00254
	.99850	.99491	.99083	.98726	.98447	.98237	.98060	.97963	.97874	.97805
.05	.00177	.00317	.00406	.00449	.00460	.00460	.00435	.00413	.00390	.00368
	.99878	.99561	.99157	.98757	.98408	.98408	.97892	.97711	.97568	.97454
.06	.00179	.00331	.00442	.00510	.00543	.00552	.00545	.00529	.00509	.00486
	.99897	.99618	.99236	.98924	.98433	.98089	.97797	.97554	.97355	.97191
.07	.00180	.00340	.00466	.00555	.00609	.00636	.00644	.00638	.00623	.00604
	.99911	.99664	.99308	.98902	.98493	.98111	.9770	.97474	.97222	.97008
.08	.00181	.00346	.00484	.00589	.00662	.00706	.00729	.00735	.00730	.00717
	.99922	.99700	.99372	.98986	.98568	.98164	.97739	.97451	.97152	.
.09	.00182	.00351	.00497	.00615	.00703	.00764	.00802	.00822	.00827	.00827
	.99930	.99730	.99427	.99054	.98647	.98234	.97837	.97467	.97131	.96831
.10	.00182	.00354	.00507	.00635	.00736	.00812	.00864	.00897	.00914	.00919
	.99937	.99755	.99474	.99121	.98725	.98312	.97902	.97511	.97145	.96831

$$U/K+IV/K' \\ -1 \\ J+IV=SH \quad (A+IE)$$

K-STN 5

$\frac{1}{A} = 1.00$

THE JOURNAL OF CLIMATE

.64266 .68908 .82986 .64270 .61255 .60676 .60317 .6009 .59914 .59720

.67716 .65456 .58574 .55252 .53440 .52361 .51677 .51216 .50892 .50657

.60	.00246	.76861	.68126	.59860	.52241	.46480	.41373	.37134	.33999	.30630
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-34065 -37306 -41128 -45554 -50002 -57221 -60002 -65554 -70002 -77306 -80002

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• 25387. 552258. 552259. 552259.

.05356 **.F.830** **.51026** **.44085** **.39265** **.35838** **.33379** **.31600** **.30296** **.29324**

$U/K+IV/K'$
 -1
 $U+IV=SH \quad (A+IB)$

K=SIN 10

1/B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
.10	.17639	.13223	.07499	.06096	.05124	.04416	.03677	.03455	.03114	
	.90630	.85571	.83470	.83162	.83022	.82925	.82861	.82816	.82785	
.20	.29222	.31588	.20960	.17423	.14832	.12880	.11367	.10164	.09186	
	.91903	.80306	.75453	.72641	.71399	.70686	.70242	.69948	.69744	.69596
.30	.33706	.44798	.39411	.33124	.28072	.24177	.21152	.18760	.16334	.1554
	.93657	.79134	.70409	.66087	.63737	.62342	.61456	.60861	.60144	.60140
.40	.35719	.53920	.49557	.42869	.36950	.32161	.28345	.25263	.22747	.20664
	.94913	.79074	.67672	.61995	.58639	.56582	.55247	.54337	.53693	.53222
.50	.36762	.60470	.57320	.50529	.44201	.38063	.34470	.30861	.27874	.25379
	.95792	.79353	.66363	.59329	.55127	.52470	.50709	.49494	.46627	.47988
.60	.37364	.65383	.63143	.56590	.50142	.44483	.39691	.35678	.32314	.29479
	.96426	.79705	.65451	.57522	.52626	.49439	.47286	.45703	.44702	.43903
.70	.37740	.69208	.67665	.61452	.55059	.49233	.44173	.39848	.36177	.33054
	.96900	.80445	.54637	.56255	.50791	.47142	.44632	.42860	.41578	.40628
.80	.37990	.72273	.71252	.65410	.59174	.53304	.48057	.43489	.39560	.36190
	.97266	.80347	.64413	.55338	.49413	.45361	.42525	.40504	.39033	.37941
.90	.38164	.74887	.74155	.68679	.62654	.56811	.51451	.46694	.42547	.38960
	.97557	.80609	.64105	.54658	.48355	.43952	.40821	.38567	.36919	.35694
1.00	.38290	.76889	.76544	.71415	.65629	.59863	.54443	.49538	.45204	.41423
	.97793	.80832	.63886	.54141	.47528	.42820	.39421	.36949	.35134	.33764

$$U/K+IV/K = -1$$

K = SIN 15

$1/B$	$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
.10	.11923 .92931	.09237 .38869	.06833 .87618	.05327 .87107	.04341 .86857	.03654 .86717	.03151 .86632	.02768 .86576	.02467 .86537	.02225 .86509
.20	.19405 .94146	.22758 .85412	.19601 .80602	.16277 .78248	.13684 .76996	.11723 .76266	.10219 .75608	.09041 .75503	.08096 .75291	.07328 .75137
.30	.22067 .95532	.32333 .85455	.31253 .77440	.27317 .72884	.23575 .70297	.20502 .68737	.18042 .67737	.16062 .67063	.14449 .66589	.13116 .66243
.40	.23201 .96467	.38577 .86479	.40531 .76150	.36783 .69614	.32338 .65728	.28507 .63318	.25277 .61747	.22619 .60675	.20421 .59915	.18586 .59358
.50	.23770 .97100	.42733 .87674	.47762 .75718	.44562 .67542	.39854 .62520	.35423 .59332	.31612 .57219	.28409 .55763	.25725 .54724	.23464 .53960
.60	.24093 .97549	.45599 .88804	.53516 .75677	.50913 .66173	.46100 .60199	.41318 .56326	.37077 .53721	.33443 .51908	.30359 .50606	.27739 .49645
.70	.24292 .97860	.47643 .89819	.58133 .75812	.56116 .65232	.51332 .58475	.46344 .54009	.41792 .50359	.37617 .48818	.34402 .47272	.31475 .46128
.80	.24424 .98135	.49144 .90687	.61924 .76019	.60424 .64564	.55742 .57165	.50655 .52187	.45883 .48739	.41638 .46294	.37943 .44522	.34752 .43209
.90	.24515 .98335	.50275 .91448	.65088 .76250	.64027 .64075	.59490 .56152	.54380 .50732	.49459 .45924	.44998 .44200	.41065 .42217	.37642 .40746
1.00	.24580 .90493	.51144 .92109	.67771 .76481	.67072 .63708	.62702 .55353	.57622 .49552	.52608 .45419	.47976 .42437	.40207 .40256	.38638 .38638

$U/K + IV/K'$
 -1
 $U + IV = SN \quad (A + IB)$

K=SIN 20

$1/A$	$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
.10	.08951	.07022	.05221	.04079	.03327	.02803	.02418	.02125	.01894	.01706
	.94117	.90667	.89584	.89137	.88917	.88794	.88719	.88669	.88635	.88611
.20	.14471	.17435	.15402	.12965	.10980	.09447	.08257	.07319	.06563	.05945
	.95197	.87985	.83751	.81580	.80399	.79701	.79260	.78965	.78759	.78609
.30	.16382	.24592	.24892	.22400	.19641	.17238	.15254	.13631	.12293	.11180
	.96362	.88378	.81480	.77171	.74602	.73015	.71985	.71204	.70789	.70427
.40	.17184	.29002	.32430	.30779	.27749	.24747	.22111	.19884	.18012	.16433
	.97133	.89527	.83992	.74736	.70731	.68169	.66472	.65305	.64473	.63862
.50	.17584	.31759	.38235	.37852	.34876	.31483	.28347	.25617	.23283	.21291
	.97652	.90712	.81306	.73428	.68036	.64593	.62239	.60606	.59435	.58572
.60	.17810	.33550	.42725	.43762	.41017	.37385	.33865	.30720	.27990	.25638
	.98017	.91756	.81961	.72759	.66251	.61883	.58922	.56048	.55356	.54253
.70	.17949	.34761	.46252	.48717	.46284	.42525	.38706	.35218	.32149	.29484
	.96287	.92637	.82744	.72453	.64922	.59791	.56269	.53788	.51998	.50674
.80	.18076	.35611	.49068	.52907	.50812	.46993	.42952	.39182	.35821	.32880
	.98493	.93133	.83555	.72356	.63940	.58138	.54110	.51257	.49192	.47663
.90	.18104	.36226	.51353	.56486	.54722	.50891	.46691	.42687	.39074	.35886
	.98655	.93989	.84340	.72380	.63198	.56803	.52325	.49131	.46612	.45024
1.00	.18149	.36684	.53234	.59573	.58118	.54317	.50000	.45804	.41969	.38550
	.98787	.94510	.85103	.72471	.62625	.55722	.50834	.47324	.44768	.42876

$U/K + \frac{IV}{I} V/K$
 -1
 $U+IV=SN$ (A+B)

K=SIN 25

	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
.10	*.07135	*.05630	*.04197	*.03263	*.02679	*.02257	*.01948	*.01712	*.01526	*.01377
	*.94848	*.92817	*.90831	*.89430	*.89032	*.89122	*.89054	*.89009	*.89979	*.89957
.20	*.11498	*.14019	*.12545	*.10643	*.09054	*.07810	*.06839	*.06068	*.05447	*.04936
	*.95820	*.69538	*.85743	*.83747	*.82645	*.81989	*.81572	*.81293	*.81097	*.80954
.30	*.12991	*.19678	*.20351	*.18647	*.16531	*.14607	*.12904	*.11636	*.10516	*.09578
	*.96844	*.90026	*.33960	*.79979	*.77525	*.75978	*.74962	*.74266	*.73771	*.73408
.40	*.13613	*.23064	*.26475	*.25831	*.23718	*.21380	*.19250	*.17393	*.15808	*.14456
	*.97517	*.91130	*.87913	*.78114	*.74232	*.71667	*.69936	*.68733	*.67869	*.67232
.50	*.13923	*.25123	*.31056	*.31906	*.30152	*.27652	*.25132	*.22850	*.20253	*.19125
	*.97953	*.92215	*.84444	*.77350	*.72355	*.68550	*.66084	*.64351	*.63100	*.62173
.60	*.14097	*.26430	*.34480	*.36965	*.35804	*.33261	*.30467	*.27831	*.25475	*.23410
	*.96285	*.93163	*.85313	*.77206	*.70798	*.66250	*.63074	*.60824	*.59194	*.57984
.70	*.14205	*.27298	*.37065	*.41183	*.40717	*.38243	*.35243	*.32308	*.29635	*.27268
	*.96518	*.93911	*.86250	*.77409	*.69953	*.64514	*.60670	*.57932	*.55944	*.54469
.80	*.14275	*.27899	*.39047	*.44723	*.44999	*.42651	*.39501	*.35311	*.33358	*.30717
	*.98697	*.94543	*.87163	*.77804	*.69425	*.63171	*.58713	*.55521	*.53200	*.51477
.90	*.14324	*.28329	*.40588	*.47722	*.48749	*.46553	*.43300	*.39892	*.36687	*.33798
	*.98838	*.95067	*.88017	*.78506	*.69198	*.62127	*.57094	*.53460	*.50849	*.48699
1.00	*.14359	*.28647	*.41805	*.50287	*.52050	*.50032	*.46697	*.43103	*.39673	*.36555
	*.98951	*.95505	*.88800	*.78944	*.58930	*.61279	*.55734	*.51731	*.48813	*.46652

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 30

	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
.10	.05907 .95344	.04677 .92591	.03491 .91691	.02732 .91323	.02231 .91142	.01680 .91041	.01622 .90979	.01426 .90938	.01271 .90910	.01147 .90889
.20	.09503 .96235	.01669 .90577	.010510 .87107	.008956 .85256	.007642 .84224	.006604 .83607	.005789 .83213	.005140 .82948	.004616 .82763	.004185 .82628
.30	.10726 .97162	.016317 .91087	.017082 .85612	.015011 .81921	.014119 .79596	.012535 .78110	.011177 .77125	.010036 .75446	.009086 .75961	.008285 .75605
.40	.11234 .97769	.019060 .92127	.022153 .85666	.021971 .80415	.020427 .76725	.018577 .74225	.016825 .72512	.015252 .71308	.013900 .70432	.012737 .69794
.50	.11486 .98175	.020703 .93124	.025885 .86364	.027114 .79971	.026124 .75927	.024247 .71499	.022221 .69016	.020316 .67246	.018613 .65957	.017116 .64996
.60	.11628 .98450	.021736 .93966	.028607 .87272	.031398 .80116	.031129 .74082	.029397 .69572	.027214 .66327	.025023 .63968	.023023 .62276	.021223 .60996
.70	.11716 .98670	.022416 .94655	.030614 .88206	.034884 .80563	.035491 .73622	.034018 .68196	.031754 .64217	.029748 .61326	.027366 .59203	.024392 .57617
.80	.11773 .98830	.022684 .95218	.032117 .89089	.037753 .81212	.039292 .73474	.035860 .67204	.032660 .62528	.03265 .59110	.030748 .56597	.028446 .54721
.90	.11813 .98957	.023219 .95663	.033263 .89895	.040129 .81917	.042619 .73529	.041654 .66483	.039569 .61152	.036815 .57236	.034063 .51354	.031506 .52207
1.00	.11841 .99059	.023463 .96071	.034150 .90619	.042113 .82644	.045544 .73716	.045178 .65957	.042927 .60014	.040331 .55628	.037074 .52400	.034297 .50000

$U/K+IV/K^*$

$U+V=SN^{-1} (A+IB)$

K=SIN 35

$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
.10	.05018	.03981	.02974	.02329	.01902	.01603	.01303	.01216	.01064
	.95701	.93153	.92316	.91974	.91806	.91711	.91653	.91615	.91589
.20	.06165	.09931	.08992	.07687	.06569	.05683	.04985	.04429	.03979
	.96532	.91319	.88094	.86356	.85385	.84801	.84428	.84176	.83999
.30	.09096	.13872	.14522	.13625	.12226	.10890	.09732	.08754	.07933
	.97388	.91628	.86784	.83326	.81121	.79697	.78746	.78088	.77617
.40	.09524	.16170	.16931	.18957	.17773	.16262	.14782	.13449	.12283
	.97948	.92810	.86926	.82052	.78553	.76139	.74465	.73279	.72417
.50	.09737	.17536	.22052	.23399	.22789	.21347	.19690	.18085	.16623
	.98321	.93738	.8764	.81795	.77132	.73715	.71265	.69497	.66197
.60	.09856	.18389	.24291	.27008	.27185	.25991	.24274	.22467	.20753
	.98594	.94515	.88541	.82092	.76452	.72083	.68856	.66491	.64740
.70	.09930	.18948	.25933	.29922	.30995	.30175	.28483	.25510	.24593
	.98777	.95147	.89443	.82676	.76247	.70998	.67016	.64061	.61862
.80	.09978	.19332	.27442	.32280	.34291	.33924	.32322	.30254	.28125
	.98924	.9563	.90276	.83394	.76345	.70296	.65590	.62061	.59426
.90	.10011	.19605	.28053	.34198	.37148	.37298	.35621	.33668	.31362
	.99041	.96083	.91031	.84161	.75636	.69664	.64470	.60388	.57336
1.00	.10035	.19806	.26753	.35759	.39633	.40329	.39013	.36796	.34324
	.99135	.96441	.91700	.84930	.77048	.69624	.63578	.58965	.55513

$U/K + IV/K'$
 $U+IV=SN$ $(A+18)$
 -1

K=SIN 40

	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
.10	.04341 .95970	.03444 .93576	.02576 .92789	.02019 .92466	.01649 .92307	.01390 .92218	.01199 .92163	.01054 .92127	.00940 .92103	.00848 .92085
.20	.06972 .96753	.08605 .91873	.07814 .86637	.06693 .87193	.05727 .06268	.04958 .05711	.04352 .05354	.03868 .05114	.03475 .04945	.03152 .04822
.30	.07860 .97556	.12005 .92372	.12710 .87651	.11896 .84385	.10709 .82279	.09561 .80910	.08550 .79992	.07707 .79355	.06990 .76878	.06362 .76560
.40	.08229 .98080	.13975 .93305	.16431 .87840	.16558 .83264	.15613 .79930	.14348 .77602	.13083 .75973	.11931 .74811	.10915 .73963	.10030 .73329
.50	.08411 .98330	.15140 .94179	.19193 .88562	.20418 .83118	.20044 .78701	.18891 .75405	.17519 .73009	.16149 .71261	.14883 .69968	.13746 .68993
.60	.08514 .98675	.15864 .94967	.21008 .89434	.23524 .83494	.23911 .78196	.23065 .73992	.21689 .70826	.20175 .68471	.18704 .66711	.17347 .65377
.70	.08577 .98856	.16339 .95496	.22382 .90294	.26003 .84128	.27240 .78151	.26815 .73124	.25536 .69209	.23936 .66248	.22295 .64018	.20738 .62322
.80	.08619 .98994	.16663 .95979	.23391 .91085	.27985 .84374	.30094 .78395	.30176 .72635	.29061 .69005	.27417 .64450	.25632 .61755	.23891 .59704
.90	.08647 .99103	.16894 .96374	.24147 .91794	.29579 .85650	.32544 .78816	.33184 .72416	.32284 .67106	.30629 .62972	.28716 .59824	.26801 .57428
1.00	.08668 .99191	.17064 .96703	.2724 .92419	.30869 .86415	.34650 .79347	.35880 .72386	.35235 .66436	.33590 .61739	.31563 .58150	.29482 .55423

$U/K+IV/K^*$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 45

1/A	1/k = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
.10	.03804	.03024	.02262	.01772	.01444	.01220	.01053	.00925	.00621	.00744
	.96177	.93903	.93154	.92847	.92055	.92645	.92558	.92524	.92501	.92484
.20	.06107	.07550	.06869	.05992	.05046	.04371	.03838	.03412	.03066	.02781
	.96922	.92298	.89409	.87839	.86953	.85419	.86076	.85845	.85683	.85565
.30	.06863	.10523	.11174	.10490	.09466	.08465	.07586	.06837	.06205	.05669
	.97685	.92786	.80315	.85198	.83176	.81856	.80968	.80349	.79905	.79576
.40	.07205	.12238	.14430	.14603	.13826	.12745	.11649	.10641	.09748	.08956
	.98182	.93678	.88527	.84165	.80931	.78740	.77155	.76020	.75187	.74564
.50	.07364	.13250	.16753	.17992	.17759	.16825	.15654	.14471	.13364	.12365
	.98513	.94510	.89241	.84109	.79898	.76715	.74377	.72658	.71379	.70411
.60	.07454	.13677	.16399	.20699	.21178	.20559	.19433	.18149	.16876	.15687
	.98745	.95200	.90086	.84527	.79510	.75464	.72371	.70045	.68292	.65955
.70	.07509	.14287	.19580	.22843	.24103	.23915	.22926	.21603	.20201	.18845
	.98917	.95760	.90912	.85181	.79566	.74751	.70929	.67995	.65760	.64048
.80	.07545	.14568	.20443	.24542	.26593	.26912	.26133	.24015	.23311	.21805
	.99047	.96214	.91668	.85931	.79695	.74413	.69900	.66367	.63652	.61566
.90	.07550	.14767	.21088	.25897	.28710	.29582	.29365	.27790	.26204	.24559
	.99150	.96587	.92340	.86699	.80389	.74339	.69176	.65059	.61671	.59418
1.00	.07588	.14913	.21578	.26987	.30515	.31963	.31749	.30544	.28691	.27115
	.99234	.96896	.92931	.87445	.80975	.74450	.68601	.63996	.60343	.57532

$U/K + IV/K$

-1

$U+IV=SN^{-1}(A+IB)$

K=SIN 50

$1/A =$	$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
.10	.03365	.92676	.002002	.01568	.01281	.01080	.00932	.00819	.00731	.00659
	.96339	.94160	.93441	.93146	.93001	.92919	.92068	.92836	.92813	.92797
.20	.05399	.06682	.06089	.05228	.04479	.03882	.03409	.03031	.02725	.02472
	.97054	.92629	.89858	.88347	.87493	.86977	.86647	.86423	.86266	.86152
.30	.06065	.09308	.09904	.09318	.08423	.07541	.06764	.06100	.05538	.05061
	.97785	.93107	.888828	.85834	.83882	.82603	.81746	.81138	.80705	.80385
.40	.06368	.10819	.12781	.12372	.12317	.11381	.10420	.09531	.08739	.08045
	.98261	.93966	.89056	.84899	.81820	.79638	.76092	.76981	.76165	.75552
.50	.06509	.11707	.16823	.15971	.15826	.15045	.14038	.13004	.12030	.11144
	.98577	.94764	.85759	.84870	.80826	.77743	.75460	.73772	.72510	.71551
.60	.06588	.12257	.15264	.18354	.16654	.14397	.17457	.16354	.15243	.14195
	.98880	.95425	.90579	.85310	.80516	.76610	.73591	.71301	.69563	.68231
.70	.06636	.12617	.17294	.20230	.21451	.21403	.20622	.19510	.18302	.17115
	.98964	.95959	.91377	.85970	.80639	.76019	.72263	.69390	.67166	.65451
.80	.06668	.12862	.18045	.21708	.23639	.24077	.23524	.22453	.21176	.19868
	.99089	.96393	.92102	.86714	.81019	.75776	.71387	.67901	.65191	.63090
.90	.06690	.13036	.18604	.22081	.25488	.26449	.26177	.25183	.23861	.22444
	.99187	.96749	.92746	.87457	.81551	.75800	.70796	.66732	.63540	.61058
1.00	.06706	.13164	.19026	.23819	.27053	.28552	.28600	.27716	.26364	.24848
	.99267	.97044	.93310	.88194	.82164	.76002	.70433	.65809	.62142	.59284

$U/K+IV/K'$
 -1
 $U \rightarrow IV = SN \quad (A + IB)$

K=SIN 55

$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
.02994	.02362	.01763	.01397	.01141	.00962	.00830	.00730	.00651	.00587
.96467	.94363	.93668	.93363	.93243	.93164	.93115	.93084	.93062	.93046
.20	.04803	.05949	.05426	.04662	.03997	.03465	.03043	.02706	.02207
.97159	.92391	.90213	.88750	.87922	.87421	.87160	.86863	.86731	.86619
.30	.05412	.06283	.06626	.06317	.07527	.06746	.06054	.05463	.04961
.97064	.93356	.89232	.86336	.84442	.83197	.82356	.81768	.81345	.81032
.40	.05664	.06623	.11303	.11579	.11017	.10197	.09349	.08559	.07854
.98323	.94191	.89470	.85469	.82475	.80349	.78039	.77750	.76948	.76345
.50	.05789	.10409	.13193	.14247	.14157	.13493	.12616	.11707	.10843
.98628	.94952	.90160	.85461	.81553	.78554	.76321	.74662	.73417	.72469
.60	.05859	.10896	.14466	.16359	.16868	.16505	.15709	.14751	.13775
.98843	.95599	.90950	.85913	.81301	.77510	.74559	.72305	.70506	.69263
.70	.05902	.11214	.15373	.18014	.19166	.19201	.18571	.17625	.16575
.99001	.96114	.91723	.86573	.81464	.76990	.73553	.70504	.68299	.66588
.80	.05930	.11430	.16033	.19314	.21102	.21591	.21193	.20308	.19214
.99122	.96532	.92435	.87307	.81875	.76031	.72558	.69125	.66432	.64330
.90	.05950	.11584	.16523	.20340	.22729	.23703	.23565	.22799	.21666
.99217	.96875	.93055	.88045	.82427	.76921	.72065	.68067	.64690	.62398
1.00	.05964	.11697	.16695	.21156	.24100	.25567	.25766	.25111	.23997
.99293	.97159	.93599	.88754	.83053	.77182	.71796	.67255	.63601	.60723

$U/K + IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 60

	1/B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
.10	.02672	*.02127	.01592	*.01247	*.01019	*.00859	*.00741	*.00652	*.00581	*.00524	
	.95568	.94524	.93848	.93571	.93434	.93358	.93311	.93280	.93258	.93226	
.20	.04286	*.05312	.04849	*.04168	*.03575	*.03093	*.02723	*.02421	*.02177	*.01975	
	.97241	.93093	.90494	.89070	.88262	.87774	.87461	.87249	.87100	.86991	
.30	.14829	*.07394	.07687	*.07461	*.06740	*.06045	*.05427	*.04893	*.04450	*.04069	
	.97926	.93556	.89551	.86734	.84886	.825669	.82446	.82270	.81655	.81546	
.40	.05054	*.08587	.10167	*.10358	*.09871	*.09143	*.08395	*.07692	*.07063	*.06508	
	.98372	.94368	.89794	.85900	.82992	.80914	.79433	.78363	.77574	.76979	
.50	.05165	*.09286	.11778	*.12740	*.12685	*.12114	*.11344	*.10540	*.09772	*.09069	
	.98662	.95117	.90473	.85922	.82124	.79195	.77005	.75372	.74143	.73205	
.60	.05227	*.09719	.12907	*.14619	*.15109	*.14821	*.14137	*.13300	*.12438	*.11613	
	.98677	.95736	.91255	.86382	.81912	.76213	.75325	.73105	.71404	.70091	
.70	.05266	*.10001	.13711	*.16067	*.17157	*.17233	*.16721	*.15908	*.14990	*.14068	
	.99030	.96336	.92009	.87038	.82203	.77755	.74198	.71391	.69206	.67504	
.80	.05291	*.10193	.14295	*.17236	*.18876	*.19377	*.19085	*.18344	*.17400	*.16393	
	.99147	.96641	.92691	.87762	.82533	.77649	.73477	.70098	.67427	.65331	
.90	.05309	*.10330	.14728	*.18142	*.2016	*.21260	*.21239	*.20607	*.19661	*.18596	
	.99240	.96973	.93293	.88486	.83097	.77785	.73057	.69125	.65973	.63482	
1.00	.05321	*.10430	.15056	*.18661	*.21524	*.22917	*.23197	*.22705	*.21777	*.20656	
	.99314	.97249	.93620	.89179	.83726	.78085	.72861	.68393	.64772	.61890	

$U/K + IV/K^*$
 $U + IV = SN^{-1} (A + IB)$

$K = \sin 65$

$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/\zeta = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
.10 .96648	.02385 .94650	.01899 .93990	.01421 .93719	.01114 .93585	.00910 .93510	.00767 .93464	.00652 .93434	.00562 .93413	.00519 .93396
.20 .97306	.03825 .93260	.04743 .90715	.04332 .89321	.03725 .88530	.03195 .86052	.02771 .87745	.02435 .87537	.02165 .87391	.01947 .87284
.30 .97975	.04310 .93711	.06600 .89801	.07046 .87046	.06653 .85235	.06031 .84041	.05411 .83232	.04860 .82666	.04366 .82256	.03646 .81956
.40 .98410	.04510 .94506	.07663 .90046	.09080 .86244	.09261 .83397	.08836 .81353	.08197 .79932	.07526 .78847	.06912 .78069	.06379 .77482
.50 .98700	.04609 .95238	.06286 .90716	.10514 .86282	.11387 .82569	.11355 .79698	.10854 .77544	.10182 .75933	.09469 .74718	.08786 .73780
.60 .98904	.04665 .95842	.08671 .91484	.11519 .86744	.13n60 .82386	.13520 .78771	.13267 .75927	.12696 .73736	.11960 .72052	.11198 .70749
.70 .99053	.04699 .96330	.08922 .92222	.12232 .87396	.14365 .82597	.15347 .78352	.15453 .74859	.15020 .72090	.14317 .69925	.13511 .68232
.80 .99168	.04722 .96726	.09093 .92889	.12750 .88111	.15383 .83039	.16875 .7828?	.17364 .74194	.17145 .70663	.16518 .68215	.14819 .66127
.90 .99258	.04737 .97050	.09214 .93477	.13133 .88824	.16184 .83608	.18151 .78449	.19042 .73628	.18562 .69956	.17753 .66830	.16823 .64346
1.00 .99330	.04748 .97318	.09303 .93591	.13424 .84238	.16820 .89503	.19219 .78775	.20514 .73682	.20832 .69295	.19677 .65699	.18709 .62622

$U/K+IV/K'$
 $U+IV=SN^{-1} (A+IB)$

K=SIN 70

	1/B	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
.10	.02121 .96710	.01689 .94748	.01264 .94099	.00991 .93833	.00609 .93702	.00602 .93628	.00589 .93583	.00516 .93553	.00462 .93533	.00416 .93516	
.20	.03401 .97356	.04218 .93385	.03654 .90886	.03315 .89515	.02844 .88738	.02467 .88267	.02166 .87964	.01928 .87760	.01733 .87616	.01573 .87511	
.30	.03831 .98013	.05869 .93830	.06269 .89994	.05923 .87286	.05372 .05504	.04622 .04328	.04332 .04351	.03912 .02973	.03555 .02577	.03251 .02272	
.40	.04009 .98440	.06813 .94611	.08077 .90240	.08245 .86505	.07872 .83710	.07308 .81701	.06716 .80264	.06160 .79222	.05660 .78453	.05218 .77672	
.50	.04097 .98721	.07365 .95331	.09349 .90902	.10134 .86557	.10117 .82912	.09665 .80085	.09089 .77959	.08459 .76367	.07853 .75164	.07296 .74243	
.60	.04147 .96924	.07707 .95924	.10240 .91658	.11619 .87021	.12044 .82749	.11852 .79195	.11338 .76390	.10693 .74224	.10020 .72555	.09370 .71261	
.70	.04177 .99071	.07929 .95403	.10872 .92384	.12775 .87668	.13666 .82973	.13782 .78807	.13417 .75366	.12807 .72629	.12100 .70481	.11380 .68798	
.80	.04197 .99183	.08081 .96790	.11330 .93039	.13676 .88375	.15020 .83422	.15482 .78763	.15316 .74743	.14781 .71452	.14068 .68825	.13296 .66747	
.90	.04211 .99271	.08188 .97108	.11669 .93616	.14383 .89079	.16149 .83993	.16972 .78952	.17040 .74416	.16613 .70594	.15918 .67493	.15197 .65019	
1.00	.04221 .99343	.08267 .97371	.11926 .94120	.14544 .89747	.17092 .84623	.18276 .79296	.18602 .74306	.18311 .74306	.17651 .69982	.16813 .66416	

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 80									
	1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90
.10	.01607 .96187	.01280 .94871	.00958 .94237	.00751 .93977	.00614 .93848	.00517 .93775	.00446 .93732	.00392 .93703	.00350 .93683
.20	.02577 .97419	.03198 .93542	.02923 .91100	.02516 .89759	.02159 .66998	.01872 .88537	.01645 .88241	.01464 .88041	.01316 .87900
.30	.02903 .98060	.04448 .93980	.04755 .90235	.04496 .87568	.04080 .65643	.03664 .84690	.03293 .83908	.02974 .83360	.02703 .82954
.40	.03038 .98477	.05162 .94744	.06124 .90482	.06258 .86840	.05932 .84101	.05552 .82131	.05110 .80720	.04690 .79695	.04311 .78937
.50	.03105 .98755	.05580 .95446	.07007 .91134	.07689 .85899	.07686 .83339	.0736d .80570	.06922 .78482	.06448 .76913	.05990 .75727
.60	.03142 .98950	.05339 .96026	.07759 .91876	.08812 .87364	.09148 .83201	.09017 .79724	.08639 .76971	.08157 .74837	.07652 .73189
.70	.03165 .99093	.06007 .96493	.08236 .92586	.09685 .88005	.10375 .83439	.10483 .79374	.10225 .76001	.09776 .73306	.09250 .71183
.80	.03181 .99203	.06121 .96871	.08581 .93226	.10363 .887n2	.11338 .83895	.11771 .79360	.11671 .75428	.11287 .72190	.10763 .69593
.90	.03191 .99289	.06202 .97181	.08836 .93789	.10895 .89392	.12248 .84466	.12898 .79573	.12982 .75146	.12689 .71392	.12185 .68328
1.00	.03199 .99358	.06262 .97438	.09030 .94281	.11316 .90048	.12956 .85094	.13682 .79936	.14168 .75078	.13986 .70839	.13518 .67316

$$J+IV = SN \quad (A+IB)$$

K=SIN 85

		1/A = .10	1/A = .20	1/A = .30	1/A = .40	1/A = .50	1/A = .60	1/A = .70	1/A = .80	1/A = .90	1/A = 1.00
.10	.01308 .96806	.01042 .94900	.00780 .94270	.00611 .94011	.00499 .93884	.00421 .93812	.00363 .93768	.00319 .93739	.00285 .93719	.00257 .93705	
.20	.02097 .97434	.02602 .93579	.02379 .91151	.02047 .89816	.01757 .89061	.01524 .80602	.01339 .80307	.01191 .80108	.01071 .87968	.00972 .87865	
.30	.02362 .98071	.03619 .94015	.03869 .90292	.03659 .87560	.03321 .85924	.02982 .84777	.02681 .83998	.02422 .83453	.02201 .83059	.02013 .82766	
.40	.02472 .98486	.04290 .90510	.04983 .86919	.05093 .84195	.04869 .82235	.04525 .80829	.04162 .79809	.03819 .79054	.03511 .78483	.03239 .78483	
.50	.02526 .98762	.04540 .95474	.05766 .91189	.06257 .86381	.06257 .83441	.05993 .80687	.05638 .78607	.05253 .77045	.04881 .75862	.04537 .74954	
.60	.02556 .98956	.04750 .96050	.06312 .91927	.07171 .87446	.07446 .63308	.07342 .75851	.07037 .77111	.06647 .74985	.06237 .73341	.05838 .72063	
.70	.02575 .99098	.04886 .96514	.06700 .92634	.07880 .88085	.08444 .83550	.08535 .79509	.08329 .76153	.07967 .73468	.07540 .71352	.07102 .69686	
.80	.02587 .99207	.04979 .96890	.06980 .93275	.08431 .88779	.09275 .84007	.09544 .79502	.09507 .75591	.09199 .72367	.08775 .69778	.08309 .67719	
.90	.02596 .99293	.05045 .97198	.07186 .93830	.08863 .89467	.09666 .84580	.10500 .79720	.10575 .75319	.10342 .71583	.09936 .68528	.09452 .66074	
1.00	.02602 .99362	.05094 .97454	.07345 .94319	.09205 .90119	.10541 .85205	.11299 .80087	.11540 .75261	.11399 .71043	.10531 .67532	.064685	

$$U + IV = SN \quad (A + IB)$$

K = SIN 86

$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
.10 .968160	.01235 .94904	.00736 .94274	.00577 .94015	.00471 .93888	.00397 .93816	.00343 .93772	.00302 .93743	.00259 .93723	.00243 .93709
.20 .97437	.02457 .93584	.02246 .91157	.01953 .89325	.01659 .89068	.01439 .88610	.01264 .88315	.01125 .88116	.01011 .87976	.00918 .87874
.30 .98073	.03417 .94020	.03653 .90299	.03455 .87478	.03136 .85934	.02816 .84767	.02551 .84009	.02287 .83464	.02076 .83070	.01901 .82778
.40 .98487	.02334 .94779	.024705 .90547	.024309 .86929	.024598 .84266	.024273 .82247	.023930 .80642	.023617 .79822	.023316 .79067	.023058 .78497
.50 .95764	.04286 .95477	.05444 .91196	.05908 .86991	.05908 .83454	.05665 .80703	.05324 .76622	.04960 .77060	.04649 .75878	.04285 .74971
.60 .98957	.04484 .96053	.05960 .91335	.06770 .87455	.07032 .83321	.06933 .79866	.06645 .77127	.06277 .75002	.05890 .73359	.05514 .72081
.70 .99039	.04613 .96517	.06326 .92639	.07440 .88095	.07973 .83563	.08060 .79525	.07865 .76171	.07523 .73487	.07121 .71372	.06707 .69707
.80 .93208	.04703 .96893	.06590 .93275	.07960 .88788	.08758 .84021	.09050 .79519	.08976 .75610	.08687 .72381	.08287 .69880	.07848 .67741
.90 .99294	.04764 .97200	.06786 .93835	.08368 .89475	.09410 .84593	.09515 .79738	.09986 .75340	.09766 .71605	.09384 .68552	.08928 .66098
1.00 .99363	.04809 .97456	.06934 .94323	.08691 .80127	.09952 .85218	.10669 .80105	.10897 .75283	.10765 .71067	.10412 .67556	.09946 .64712

$U/K + IV/K$
 -1
 $U+IV=SH \quad (A+IB)$

K=SIN 87

$1/A$	$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
	.01152	.00916	.00687	.00530	.00440	.00371	.00320	.00281	.00251	.00226
	.96809	.94906	.94277	.94019	.93991	.93619	.93776	.93747	.93727	.93712
.20	.01647	.02292	.02055	.01804	.01548	.01343	.01180	.01050	.00944	.00856
	.97437	.93587	.91162	.89830	.89074	.88626	.88321	.88122	.87982	.87860
.30	.02081	.03166	.03109	.03224	.02926	.02628	.02352	.02134	.01939	.01774
	.98074	.94023	.90305	.87675	.85941	.84795	.84017	.83477	.83079	.82787
.40	.02117	.03706	.04390	.04487	.04250	.03987	.03667	.03366	.03034	.02854
	.98488	.94762	.90552	.86336	.84215	.82257	.80853	.79833	.79078	.78508
.50	.02225	.04000	.05080	.05513	.05513	.05287	.04968	.04629	.04301	.03999
	.98764	.95480	.91201	.86999	.83463	.80711	.78634	.77773	.75890	.74984
.60	.02252	.04117	.05561	.06310	.06561	.06470	.06201	.05858	.05496	.05146
	.98957	.96467	.91935	.87453	.83331	.79675	.77140	.75016	.73373	.72036
.70	.02269	.04305	.05902	.06942	.07440	.07521	.07340	.07021	.06646	.06260
	.99100	.96519	.92944	.88102	.83573	.79537	.76185	.73502	.71387	.69723
.80	.02280	.04387	.06149	.07423	.08172	.08445	.08370	.08107	.07735	.07324
	.99208	.96895	.93279	.88795	.84031	.79532	.75625	.72404	.69817	.67756
.90	.02287	.04445	.06332	.07808	.08780	.09252	.09319	.09115	.08756	.08333
	.99294	.97202	.93639	.89462	.84604	.79751	.75356	.71523	.68570	.66117
1.00	.02292	.04487	.06470	.08109	.09287	.09956	.10169	.10046	.09717	.09283
	.99363	.97457	.94327	.90133	.85229	.80119	.75300	.71066	.67578	.64737

$U/K+IV/K'$
 -1
 $U+IV=SN \quad (A+IB)$

K=SIN 88

$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
.10 .91053	.00639 .94908	.01626 .94279	.00492 .94021	.00472 .93822	.00339 .93778	.00293 .93749	.00257 .93729	.00229 .93715	.00207 .93715
.20 .01689	.02096 .93590	.01516 .91165	.01649 .89634	.01415 .89076	.01227 .88620	.01079 .88326	.00959 .88127	.00863 .87987	.00783 .87884
.30 .015.2	.02914 .98075	.03116 .90308	.02947 .87680	.02675 .85347	.02402 .84801	.02159 .84023	.01951 .83478	.01773 .83085	.01622 .82793
.40 .01990	.02582 .94784	.04013 .90556	.04102 .86941	.03922 .84221	.03645 .82263	.03352 .80860	.03077 .79849	.02829 .79086	.02609 .78516
.50 .02034	.03656 .98764	.05643 .95462	.05040 .91205	.05040 .87004	.04833 .83470	.04542 .80719	.04232 .78642	.03932 .77081	.03656 .75899
.60 .02059	.03825 .98958	.05053 .96057	.05775 .91942	.05997 .87468	.05914 .83336	.05669 .79886	.05355 .77149	.05025 .75025	.04704 .73363
.70 .02074	.03935 .99100	.05395 .96520	.06346 .92647	.06801 .88107	.06875 .83581	.06710 .79545	.06419 .76195	.06076 .73513	.05723 .71398
.80 .02084	.04010 .99209	.05621 .96096	.06790 .93282	.07470 .88001	.07720 .84036	.07659 .79541	.07412 .75636	.07071 .72415	.06695 .69829
.90 .02091	.04063 .99294	.05788 .97203	.07137 .93641	.08026 .89487	.08458 .84611	.08519 .79761	.08533 .75367	.08007 .71635	.07610 .68583
1.00 .02096	.04102 .99363	.05915 .97458	.07412 .94329	.08489 .90138	.09101 .85236	.09296 .80129	.09185 .75312	.08884 .71100	.08480 .67592

$U/K+IV/K'$
 $-I$
 $U+IV=SN$ (A, IB)

K=SIN 89

$1/A = .10$	$1/A = .20$	$1/A = .30$	$1/A = .40$	$1/A = .50$	$1/A = .60$	$1/A = .70$	$1/A = .80$	$1/A = .90$	$1/A = 1.00$
.10	.00919	.00732	.00546	.00429	.00351	.00266	.00224	.00200	.00180
	.94909	.94280	.94022	.93895	.93623	.93750	.93731	.93716	
.20	.01473	.01628	.01671	.01436	.01234	.01011	.00837	.00752	.00683
	.97436	.93591	.91167	.89637	.89080	.88623	.88129	.87983	.87887
.30	.01659	.02542	.02718	.02570	.02333	.02095	.01883	.01701	.01415
	.98075	.94027	.90311	.87683	.85950	.84804	.84027	.83482	.82797
.40	.01736	.02950	.03500	.03578	.03421	.03171	.02924	.02664	.02276
	.98489	.94785	.90559	.86944	.84225	.82267	.80664	.79845	.78521
.50	.01774	.03189	.04050	.04396	.04396	.04215	.03962	.03691	.03430
	.98764	.95483	.91207	.87607	.83474	.80723	.78647	.77086	.75905
.60	.01756	.03236	.04434	.05037	.05231	.05159	.04945	.04671	.04104
	.98956	.96058	.91944	.87471	.83342	.79891	.77155	.75389	.72112
.70	.01609	.03132	.04706	.05535	.05932	.05997	.05853	.05599	.05300
	.99100	.96521	.92669	.88110	.83685	.79551	.76261	.73519	.69741
.80	.01816	.03498	.04503	.05922	.06518	.06734	.06681	.06461	.05841
	.99209	.96897	.93204	.88904	.84043	.79547	.75642	.72422	.67778
.90	.01824	.03544	.05049	.06226	.07001	.07377	.07231	.07259	.06646
	.99294	.97204	.93843	.89490	.84615	.79767	.75374	.71643	.68591
1.00	.01828	.03578	.05159	.065	.07404	.07938	.08109	.08012	.07750
	.99363	.97459	.94331	.90141	.85240	.80135	.75319	.71106	.67601